THE PROBLEM OF REVERSE FLOWS
IN
A DEVELOPING ECONOMY
(WITH SPECIAL REFERENCE TO INDIA)

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This is to certify that this thesis is the original work of the candidate done under my supervision and is suitable for submission for the award of Ph.D. degree in Economics.

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A B S T R A C T

With foreign aid having touched a new high in this country, during recent years, the problem of reverse flows (i.e., repayments) has assumed a special importance. Various studies, e.g., by CH.John & D.S. Paaw, Mikesell, B.R. Shenoy, Clive Gray, S. Swamy, S. Venu and Tata Quarterly(among many others) have cast a doubt on India's capacity to repay foreign debts. An Ex-Finance Minister tried to dispel these doubts by assuring foreign donors that India would do all she can to honour her economic commitments. The problem, however, requires a systematic and scientific analysis. It has been analysed at three stages, viz., Is the repayment drain lethal? (2) are the dates of aid termination as visualised by the Planning Commission all right? and (3) what variables can help us in the repayment problem?

The severity of the repayment problem has been found out, chiefly, by calculating the debt-servicing ratio and also by calculating a variant of this ratio, by comparing the weighted average rates of interest with the rate of growth, by debt servicing as a percentage of GNP and by finding out the consequences of hard terms/nature of aid. Our conclusion is that the repayment drains are quite severe, though not lethal, as the debt servicing ratio is quite high(above 25%). Such a high debt servicing ratio is a disturbing factor due to the weakness of favourable variables. The prospects from exports

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have not been encouraging. The prospects(direct) from private capital inflows are negative. The chances of inflation-induced import have increased during the recent years. The compressibility of imports has not been worked out. The reserves have touched the rock bottom. The cost of compensatory finance is prohibitive and much relief cannot be expected from this side also. There has been an increasing tendency for debt relief and general purpose loans during recent years. The finance for repayments and even for the outflow of private foreign investment have mostly come from further aid. The modified version of debt servicing ratio which is a more realistic concept also establishes the same point as this percentage is between 33-39% for some years and is higher than the simple debt servicing ratio. The same conclusion is obtained when we compare the rate of growth of the economy with the weighted average rates of interest or find out the percentage of repayments to the GNP. India seems to be exporting more than 1 percent of her GNP, which is more than what the developed countries are sending out. The terms of assistance and aid tying again bring out clearly the oppressive nature of the repayment burden.

The methodology of analysis is to prepare a profile of our liabilities of the principal and of the interest of the existing debt with the help of amounts of loans, rates of intere and years of repayments minus grace years. To these have been added the liabilities due to additional borrowings(actual/propos in the Fourth and Fifth Plans after making relevant assumptions with respect to terms of aid - the weighted years of maturity,

the weighted average rate of interest, weighted grace years. The total liabilities are obtained by lumping together these (liabilities). The export projections have been worked out separately and then debt servicing ratios have been calculated and analysed.

As regards the second aspect, aid termination, various Planning Commission dates, suggested from time to time, viz.,1976 to 1978, 1980 or so, 1978-79 and 1985-86 have been critically examined. Our conclusions here are that none of these dates is relevant as none satisfies the concept of import-export equality, more so, in view of increasing crude imports. It, therefore, seems necessary to step up growth and tilt the growth pattern in favour of import substitution/export promotion, develop key and basic industries, agriculture and allied spheres, export industries and articles of mass consumption.

The reverse flows, ultimately depend upon surpluses, internal(savings over investments) and external(exports over imports) and on an excess of domestic production (Y) over domestic use (C+I). Ex-post, the external surpluses equal internal surpluses. This has been clarified by using some identitie Again using macro variables (Chapter I), it becomesclear that these surpluses are also equal to the excess of domestic production over domestic use. The steps to ease the repayment problem are, therefore, concerned with identifying various variables generating these surpluses. The Saving Investment trends in the economy have been analysed and their declining nature has been considered harmful for the economy. Suggestions like strict fiscal discipline,

netting unaccounted surpluses and black money, greater taxation of agriculture, some shift in the diversion of resources to the unproductive public sector, greater taxation of urban immovable property and taxation of import licenses have been considered necessary for the internal surpluses, i.e., increasing the proportion of savings over investment.

Another variable which can ease the repayment problem is import saving/substitution. It saves the much needed foreign exchange and makes the same available for repayments. There seems to be a lot of confusion regarding the nature and measurement of import saving/substitution and its relevance and scope for LDCs. The concept has been properly defined and it has been found out that there is, in this country, a lot of scope for the right type of import saving/substitution. It has also been found out that much of the criticism of import saving/substitution is misplaced. The theoretical defects of import saving/substitution have been examined and our conclusion is that these have been unduly magnified and it is not good, from the economic angle, to dismiss all types of import saving/substitution. The scope of a right type of import saving/substitution, in various directions, has been underlined.

The private foreign capital is another variable which can be of use in easing the repayment problem and also toning down a high debt servicing ratio. Its composition, distribution, effects on savings, investment , exports, imports and growth have been examined. Our conclusion here is that, under the present circumstances, this capital is not of much use in augumenting cash inflows. The only use which this capital has

is in indirect ways of promoting growth and closing the internal external gaps. The role of private foreign capital can be increased by less reliance on turn-key projects, emphasising cash inflows, Indianisation of staff, lessening dominance of foreign monopoly capital, checking multiple colloborations, preventing spilling into low priority channels, examining the bases and rates of royalties, checking the import of backward, capital intensive techniques and greater taxation of this capital where the profit-ability is very high.

If the quality of aid is improved this will increase its productivity and lessen the severity of the repayment problem. Our finding, in this respect, is that there are a number of leakages '(ratholes)' due to the weakness of aid administration programmes. All these-indiscriminate aid receiving, delays between pledging and authorisation between authorisation and utilisation, complexity of actual programmes, non-coordination among Government agencies, the faults of donors in dictating hard terms of aid, tying a considerable portion of aid,attempts of donors in enlarging external gaps and making it discountinuous- have been pinpointed. The Friedmen-Chenoy thesis of aid on commercial terms and multilaterlisation of aid have been examined and their faults have been pointed out.

Inflation is another disturbing factor in the repayment problem and its effects on various variables-imports, exports, their structure, savings, investment, capital flights, capital formation-have been critically examined. The claims of creative inflation have also been critically examined. The course of inflation in

this country has been traced. The inevitable conclusion here is that the present run-away prices will worsen the situation considerably unless timely steps are taken to control demand/ increase supply. The repayment problems will also assume a more grave shape if inflation remains unchecked.

Export promoting measures constitute the major policy planks in the repayment problem for these may secure the external surpluses, X over M, and may directly set off the repayments and also tone down the rigours of a high debt servicing ratio. Our conclusion here is that the sense of complecency which prevails on the export front is a false one. The more rigourous indicators of a country's export performance, like the ratio of exports to GNP and ratio of exports to world trade, are still very low and declining. Indian performance is not comparable to the puny Hong Kong which is .03 per cent of its area. Various aspects like stimulating traditional exports, labour-intensive exports, industrial exports, quality goods exports, handling problems relating to packing, packaging, taking care of likely developments in the world economy, rupee trade, export finance and credit, export houses, marketing surveys, tariffs have been briefly examined and suitable guidelines have been suggested for increasing export earnings. Earmarking for exports the products of some industries for which there is a considerable foreign demand and where we have a considerable comparative advantage can be of a considerable help. This is not the same thing as compelling some newly started concerns to export at throw away prices. Earlier various difficulties of LDCs on the

export front,viz., narrow base, elasticity pessimism, fluctuations in export values and earnings, sagging demand for primary products due to the advance of synthetic materials in DCs, tariffs, pattern of industrial products in DCs and quotas have been mentioned and the measures adopted by LDCs to set their own house in order have been critically examined, though very briefly.

The measures for securing an excess of Y over C+I (domestic production over domestic use) are equally relevant for the repayment problem. In this case, our conclusion is that revitalisation of our economy will narrow internal/external gaps and ease the repayment burdens. Economic advice for revitalisation is perhaps the most readily available thing. However, an attempt has been made to identify some additional areas which, if attended to, can bring about this revitalisation. The areas which need immediate policy corrections have been distinguished from those which are of long term relevance, viz., changing institutions, overhauling education, greater economic equality, more literacy and a war on poverty. The long term measures have not been discussed in details because they are of long term nature and because they would make the present work unduly long. Our findings are that policy measures, viz., raising bank rate, raising lending rates, increasing minimum liquidity ratio have been responsible for freezing credit and delinking credit with requirements of industries and have been putting obstacles in the way of starting and expanding ventures. The fiscal measures dealing with dividend freeze, prolonged price controls, licensing policies are some other road blocks in the industrial development. The under-utilization, defective industrial policy causing inordinate delay

in the issue of letters of intent, licences to start new ventures, foreign exchange allocation, getting clearance from the MRTP, power famine andindustrial harmony have been critically examined. The agricultural front is lagging due to its problems. Some more important problems relating to finance, land reforms, supply of inputs, tenures, ceilings have been critically commented upon.

Other more disturbing factors causing set back in the production are the defective mineral policy, excessive flow of black money and inability of the public sector to mop up surpluses for growth. The policy corrections for greater production and for ending production crisis in these more important lines have been added. The economic agenda is bound to be a big one. The advantages of attention to the factors mentioned for ending stagnation/ production crisis cannot, however, be over-emphasised.

The problem of reverse flows has been a severe one for this country but unnecessarily so for the terms of aid are not so oppressive. The weighted average rate of interest has climbed down to a figure which is a little less than 2.5 percent, the grace years to 8.5 years and the years of maturity minus grace years to about 30. The private sector considers a rate of interest of 24 per cent per annum(2 per cent per mensum) and the repayment period of 10 years without any grace period as not so opperessive. The repayment burdens for this country need not also be so oppressive, at least, with the present findings and conclusions.

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GLOSSARY/ABBREVIATIONS

Aid: All loans and grants, in cash and kind made by the Governments of a developed country or international bodies to the Government of a developing country for economic purposes.

Project Aid: A sum of money which is intended to cover the foreign exchange cost of a project. It need not cover the whole, though it normally does.

Non-Project Aid: refers to all other goods provided under the aid programme: primary products, semi-finished products, spares, machine tools, capital equipment ... spent generally to support balance of payments.

Gross Aid: exceeds the net aid by payment of interest on past loans and repayment of capital.

Rescheduling is lengthening of period of loan.

Refinancing is making new loans to meet obligations on outstanding loans.

Bisque clause allowed Britain to opt out of capital payments (though not interest) in an agreed number of years.

Turnkey: A factory or project which a contractor supplies complete and ready to operate. He turns the key and gives it to the purchaser who may (or may not) be capable of operating it.

P.L. 480	Public Law 480
RBI	Reserve Bank of India
R.E.S.	Review of Economics & Statistics
UK	United Kingdom
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
US/USA	United States of America
USAID	United States Agency for International Development

c.i.f.	Cost, Insurance, Freight
CSIR	Council of Scientific and Industrial Research
CSO	Central Statistical Organisation
DC	Developed Country
EPC	Export Promotion Council
EPW	Economic and Political Weekly
FAO	Food and Agricultural Organisation of the United Nations
f.o.b.	free on board
FTR	Foreign Trade Review
FYP	Five Year Plan
GATT	General Agreements on Tariffs and Trade
GNP	Gross National Product
GOI	Government of India
HYV	High Yielding Variety
IBRD	International Bank for Reconstruction and Development
IDA	International Development Authority
IIPO	Indian Institute of Public Opinion
IMF	International Monetary Fund
ISI	Import Substitution Industrialisation
Kw	Kilowatt
LDC	Less Developed Country
LSQ	Lok Sabha Question
MKW	Million Kilo Watt
MRTP	Monopoly and Restrictive Trade Practices
NCAER	National Council of Applied Economic Research
NDRI	National Dairy Research Institute
ONGC	Oil and Natural Gas Commission

C O N T E N T S

PART I

Chapter I

INTRODUCTION

Foreign Aid -- the use of public funds and funds from international agencies for the specific purpose of promoting and assisting in the economic development of other sovereign countries -- has only a short history of over two decades, beginning from 1950. However, during this short span it has run into numerous difficulties -- a sort of tangled maze. Familiarity with aid has bred scepticism, cynicism, fatigue, malaise and even down-right indictment and of these aid to India is no exception. "The cobbler, however, must stick to his last". The problems of aid repayment are many and varied. This study has a bearing only on the economic aspects of the problem. Even out of these it proposes to isolate and answer only three of them. First, how severe is the repayment problem? Is the repayment drain lethal?[1] Allied with it is the second aspect. Is the aid termination within sight? The third aspect deals with suggesting and examining various policy measures which can help us in the repayment problem.

The method of analysis is to prepare, first of all, a time profile of our liabilities of the principal and of the

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1. Various studies have cast a doubt on India's capacity to repay foreign debts. See, e.g., C.H. John and Douglas S. Paauw, "Foreign Assistance and Self Help: A Reappraisal of Development Finance", R.E.S., Vol. XLVII, August 1965; Tata Quarterly, January 1966; Mikesell, Economics of Foreign Aid; S. Swamy, "Planning Economic Growth without Foreign Aid" (unpublished paper); B.R. Shenoy, several articles in Indian Economic Policy; S. Venu, "India, Debtor in Eternity", Indian Finance, 80(10), pp. 360-61.

interest of the existing debt. To these have been added the liabilities due to additional borrowings, actual and proposed, in the Fourth and Fifth Five Year Plans after making relevant assumptions regarding the terms of assistance. The projections of exports have been worked out separately and inferences regarding the severity of repayments have been drawn on the basis of the familiar debt-servicing ratio. A modified version of the Debt Servicing ratio, by lumping together all the earnings from abroad and then calculating this ratio, the analysis of weighted rate of interest, debt servicing as a percentage of GNP lead to the same conclusion. A chapter on "Aid Termination" at the end of Part I examines the date(s) of aid termination as visualised by the Planning Commission.

The reverse flows, in the ultimate analysis, depend upon internal and external surpluses and excess of domestic production over domestic use. Ex post, the external surpluses must equal the internal surpluses. This can be clarified by using the following identities.

$$I = S$$

$$\text{and} \quad I = I_d + I_f$$

I_f is possible when experts are greater than imports, i.e.,

$$I_f = X - M$$

$$\text{substituting} \quad I_d + X-M = S$$

$$\text{or} \quad X-M = S-I_d \qquad \ldots\ (1)$$

(Here I stands for investment, S for savings, I_d for domestic investment and I_f for foreign investment, X for

experts and M for imports)

The successful condition of the transfer is that experts increase imports and savings exceed domestic investment.

Also, considering the macro-economic variables in an economy,

$$Y+M = C+I+X$$

Here Y stands for domestic production of goods and services, M for imports and X for experts, C for consumption and I for investment. The identity shows the availability of goods and services on the left side and the use of these resources on the right side.

From the above, it can be stated that $M-X = (C+I)-Y$. In the earlier stages, consumption plus investment can exceed domestic production because there is an excess of import of goods and services over export of goods and services. Ultimately, the borrowing country has to generate surpluses of export of goods and services over import of goods and services because it is only under this case that net repayments are possible. This is illustrated by the rearrangement of the identity.

$$X-M = Y-(C+I) \qquad \ldots\ (ii)$$

In other words, there must be an excess of domestic production over domestic uses.

From (i) and (ii) it is clear that increasing domestic production (Y) over domestic uses (C+I), creating external surplus (X over M) and internal surpluses (I over S) are equal and form the major theoretical planks for the repayment problem and also of the suggested policy measures. It must be emphasised that although all these surpluses are ex post equal

yet the generation of an external surplus must be regarded as essential because it sets off the repayment burden in a direct way. Excess of saving over investment or of domestic production over domestic use if exported or devoted to import saving/ substitution will achieve the same result directly. In other cases the surpluses may achieve the same results indirectly. Incidentally, different policy measures emerging out of the above theoretical framework of generating surpluses also tone down the rigours of a high debt servicing ratio. These policy measures, which can help us in the repayment problem, are discussed and examined in Part II.

A few qualifications are to be noted carefully regarding savings, investment and exports. Savings release resources from consumption which, when utilised, add to the stock of productive capital and promote output expansion. A reduction in consumption will increase savings only if the total output is not effected adversely and the resources released from consumption are in fact utilised for additional investment. Secondly, a cut in consumption, in certain circumstances, may bring about a reduction in the volume of savings, actually realised, if the fall in consumption leads to a decline in business expectations. Thirdly, there may be constraints on the conversion of savings into investment because the capacity of developing countries to manufacture capital goods is generally limited. Fourthly, an additional constraint may be imposed due to the paucity of foreign exchange. The cut on the consumption does not release, automatically, resources for exports or reduce the demand for other imported goods. Fifthly, a low level of savings may

result not from the low cut on consumption but because of low levels of income. Increasing savings are, therefore, a necessary but not a sufficient condition of growth of output.

Regarding investment, the efficiency in selection, design and execution of projects, co-operation between capital and other factors are important. Unexpected demand deficiency, raw material shortage do not enable higher investment to achieve increased output. The failure of the harvest yields, at times, also obscures the relationship between investment and output. All this, however, does not detract from the strategic role of investment in increasing domestic production, its ability to transmit technical progress, to improve organisation and skills, to add to the flexibility of the economy and facilitate its structural adaptation.

Regarding exports it may be pointed out that they are not necessarily an indicator of correct economic performance if these are being given at throw away prices.

The policy measures discussed and evaluated in Part II relate to mobilising savings, increasing import saving/ substitution, increasing the flow of private foreign capital, curbing inflation for higher external resources, increasing aid efficiency, export promotion and other measures leading to an increase of Y over C+I.

The chapter on saving investment trends offers comments on the saving investment policies of the Government of India. It examines the state of savings and investment in the economy and holds that the prevailing declining trends are harmful for the repayment problem of the country.

The chapter on import saving/substitution begins with a critical examination of some of the definitional aspects of the concepts and their measurement. It then examines the theoretical defects and that whether these theoretical defects necessarily follow in India. Contrary to the popular beliefs, our analysis shows that the scope for a right type of import saving/substitution does exist, in a large measure, in India and the programme of import saving/substitution is worth following, at least, in all such cases.

The chapter on Private Foreign Capital examines the theoretical benefits of increasing domestic production Y over C+I; whether these theoretical benefits actually flow in case of India; the availability and possibilities of free foreign exchange for repayments. A beginning has been made with a section on the composition of the private foreign capital in India. Our analysis reveals that the scope of this capital, as a direct measure, is meagre for the repayment problem.

The chapter on Inflation and External Resources examines the impact of inflation on various variables -- imports, exports, capital flows, savings/capital formation -- which are related directly or indirectly to the repayment problem. Separate sections are devoted to the nature and extent of inflation prevailing in India and its possible consequences for the repayment problem. Here again, our analysis reveals that the current inflation is hardly helpful in the repayment problem.

The chapter on Increasing Aid Efficiency examines the problem of aid within its own framework and points out the

lacuna in the aid administration programmes. A complete section is devoted to aid tying and its harms. The inference, here is that a lot of vigilance is needed to effect an improvement in the efficiency of aid resources for getting an increase in external/internal resources.

The chapter on Export Promotion forms the main plank of programmes for the repayment problem. Hence the export promotion measures have been examined in some detail. The chapter begins with the theoretical difficulties which are associated with the exports from LDCs. The second section is devoted to different measures, being adopted by LDCs, exporting primary products, to set their own house in order. In the third section, the problems of export of manufactures and semi-manufactures from LDCs are dealt with. In the fourth section, specific policy measures concerning India's exports are examined. The conclusions here are that India has yet to make a big effort in this direction and the sense of complacency which prevails, in some quarters, is uncalled for.

The concluding chapter discusses some more areas which need attention and policies which need correction for securing an excess of Y over C+I.

Before, however, turning to all these, an idea of the nature of aid received from different countries/sources is necessary; so, the beginning has been made with a 'Profile of Aid to India'.

Chapter II

PROFILE OF AID TO INDIA

An attempt has been made below to give the nature of aid -- magnitude, terms of assistance, years of maturity, grace periods and other characteristics -- received by India. Aid is in the form of a flow. The cut off point (March 1974) chosen is in accordance with the latest information available at the time of writing of this draft.

The total loan authorisation for India, from inception to March 1974, is Rs. 10,418.4 crores. PL 480/665 assistance amounting to Rs. 2,637.5 crores is in addition. Similarly grants totalling Rs. 712.0 crores upto the same period are also in addition. The utilisation of loans stands at Rs. 8,386.2 crores, of grants it is nearly complete and of PL 480/665 it is Rs. 2,636.8 crores.

Source-wise details of the aid received from inception are given below in the appendix.

USA

The assistance given by USA is vast in scale and varied in kind. It is spread through the whole of economic life of this country. The proportion of aid is the highest. The aid commenced in 1951 with a loan of $ 189.7 million for the purchase of two million tonnes of wheat. Since then the USA has extended support to many aspects of India's development programmes. The aid has been extended through Technical

Cooperation Mission, Development Loan Fund and its successor, the Agency for International Development (AID), the Export Import Bank, PL 480 programme and others. Food aid has mainly come from the USA under PL 480. Upto March 1974, the total aid from USA has been Rs. 5,260.8 crores, of this loans are Rs. 2,433.3 crores, grants Rs. 190 crores and PL 480/665 assistance is Rs. 2,637.5 crores.

Initially, US assistance was in the form of grants under Technical Cooperation Programme. Other categories in which the aid was extended were Development Financing, Food for Peace and US Banks. A brief account is given, in the following paras of each category.

The United States Technical Cooperation Programme began in 1951. The programme has given assistance to agricultural and natural resources, industry and mining, transportation, labour, health and sanitation, education, management and other mutually approved projects. In agriculture, the assistance has been given to increase food production and farm income, to improve rural living conditions, to stimulate institutional changes, to conserve soil and water resources, to improve storage, livestock, dairy, to promote agricultural research and strengthen extension services. In industry and mining, power, coal, lime, phosphorus, steel, machine tools, tubewell casing, rural electrification schemes, hot line maintenance, transmission and distribution lines are some of the major programmes covered. In transportation, railway rehabilitation and development, highway transportation and aviation, ground facilities are some major programmes. In labour, Bombay Central Institute for Craftsman and Instructors,

construction of equipment, Operators and Trades Training are major programmes. In Health and Sanitation, the malaria eradication programme, insecticides, drugs and equipment, water supply and sanitation, medical education/training and nursing college development, control of filaria and expansion of family planning programme have received attention. In the field of education, chemical, civil, electrical, mechanical, metallurgical and aeronautical engineering, post-graduate study and research and IIT Kanpur have been major beneficiaries. In management programme, attention has been paid to management planning, to improving organisation, procedures, executive skills and performance. The Ministry of Finance, GOI, Indian Institute of Public Administration, Punjab, Jaipur and Lucknow Universities and Ministry of Home Affairs, GOI, have received major help. The sale proceeds of American wheat and cotton have gone to assist many mutually approved programmes.

The category of Development Finance was established to make possible the purchase and importation of certain capital goods and equipment and related services. The assistance has been provided in different forms and from several US agencies. Under this category, Development Assistance loans have been extended for such projects as ground water irrigation, river valley development, ground water exploration, Rihand Valley Development, Delhi Thermal Plant and rural electrification, import of fertilizers, iron and steel for agriculture, raw and semi-processed materials for India's productive capacity. The Industrial Credit and Investment Corporation of India received an amount of Rs. 75 million and community projects

received aid out of counterpart funds. The Development Loan Fund (DLF) -- an autonomous US Government Corporation granted loans worth $ 506.9 million to Government of India and to private bodies. The loans are repayable in rupees within 5 to 20 years and carry interest from 3½ per cent to 5½ per cent per annum. The DLF was succeeded by the Agency for International Development (AID) on November 3, 1961. The loans granted by AID are repayable in dollars. The repayment is spread over 40 years including a grace period of 10 years. The DLF/AID have benefitted various sectors, viz., Power Development, Railways, Motor Vehicle Production and other sectors. In power development, one-third power is accounted by 30 power projects aided by USA. The financial assistance equals $ 423.3 million in foreign exchange from the sale proceeds of US agricultural commodities. The US aid for railways has helped this country to purchase steam and diesel locomotives, railway wagons, electric locomotives and coaches, components and spare parts for the fabrication of rolling stock and other equipment. In motor vehicle production, the loans have been given to three Indian firms to expand their production of motor vehicles. With the non-project assistance, non-ferrous metals, a wide variety of chemicals, lubricants, components and fertilizers have been aided. The US Exim Bank has been giving loans for the purchase of capital equipment and related services in USA to beneficiaries in both the public and private sectors. Repayments are in semi-annual instalments, spread over 12 to 16 years, with a grace period of 2 to 4 years.

Wheat loan 1951 marked the beginning of the programme of US aid to India. The loan was at 2½ per cent interest. It was repayable in dollars but its payment has been deferred several times. PL 480 Title I allows imports under rupee payment terms. Eighty per cent of rupee deposits are earmarked for being given to the Government of India for financing mutually agreed projects of economic development. The balance of 20 per cent has been earmarked to be retained by the US Government (a) for its own use in India; and (b) for giving loans to joint Indo-US enterprises commonly known as Cooley Loans. An amendment to US PL 480 Law in 1967 envisages a gradual transition over a period of five years from sales for local currencies to sales against long term credits which are repayable in dollars. Title II and III PL 480 provided respectively for donations of agricultural commodities for extraordinary relief requirements and distribution through voluntary agencies. The US Government have allowed a total of Rs. 43.8 million for Triangular Trade transaction out of US Government holdings of local currency in certain countries.

A consortium of US Banks and Boeing Coy have financed different loans, totalling Rs. 741.44 million, to Air India for the purchase of Boeing Jet aircrafts.

Federal Republic of Germany:

Upto March 1974, the Federal Republic of Germany have extended credits totalling Rs. 915.1 crores of which loans are Rs. 880.5 crores and grants Rs. 34.6 crores. Out of these, the utilisation of loans stands at Rs. 874.7 crores; of grants, at

Rs. 34.0 crores, out of a total utilisation of Rs. 908.7 crores. The bulk of credits during the second plan period were in the form of cash assistance and helped in stabilising India's balance of payment position. Since 1961-62, a major part of these credits has been earmarked for specific projects and programmes. The share of project to non-project aid, after 1966-67, is 75:25.

The major projects financed under the German credits are: (1) Rourkela Steel Plant, Stage I designed to produce one million tonnes of ingot steel, Stage II designed to produce 1.8 million tonnes; (2) Rourkela Fertilizer Plant (Rourkela, Orissa) designed to produce 580,000 tonnes of calcium ammonium nitrate; (3) Mysore Iron and Steel Works, Bhadravati (Mysore) which have completed their expansion scheme for an additional 100,000 tonnes common steel capacity; (4) Expansion of Kalinga Iron Works, Barbil (Orissa) which are expanding their capacity for production of pig iron from 30,000 tonnes to 100,000 tonnes per annum; (5) Neyveli Mining Fertilizer and Briquetting and Carbonising Project (Neyveli, Madras) for mining machines. The briquetting and carbonising plant will produce 380,000 tonnes of carbonised briquettes per annum. The fertilizer factory has been designed to produce 152,000 tonnes of urea annually; (6) New Government Electric Factory, Bangalore (Mysore) has been designed to manufacture upto 132 KV, switchgear and control gear upto 11 KV and motors upto 6.6 KV; (7) Expansion of Kargali Coal Washery - The yield of clean coal from the washery after expansion is expected to be of the order of 1.9 million tonnes per annum; (8) Sawang Coal Washeries for beneficiating .75 million tonnes of raw cooking coal per annum with the possibility of extending

its capacity upto 1.0 million tonnes; (9) Telco Tool Room Project, Poona for manufacturing large and medium press tools, heavy dies, jigs and fixtures; (10) Railway Development covering diesel shunting locomotives, route relay interlocking at Ahmedabad Railway Station, roller bearing for wagon buildings, production of different types of locomotives; (11) Shipbuilding Machinery and Ships; (12) Power Equipment comprising transformers, switchgears, telemetering equipment, cables, turbo alternators; and (13) Direct loans to Industrial Finance Corporation of India, the Industrial Credit and Investment Corporation of India and the National Small Industries Corporation Ltd. The sub-loans cover a large variety of industries.

Besides the Government credits, suppliers' credits forming a part of consortium assistance have been provided for ships and capital goods. The credits are to be repaid over a period of 10 years after final delivery. The rate of interest on these credits ranges from 5½ per cent to 6 per cent per annum.

The terms of credit were hard before 1960 but there has been a considerable softening after 1968.

The West German Government have been providing debt relief in the nature of refinancing repayments before 1968. During 1968-71 the debt relief was in the form of liquidity assistance; (2) prolongation of past loans; and (3) reduction in interest charges on past loans.

The German Government have been giving assistance in the form of grants, experts, training facilities to certain selected projects. The following institutions have benefitted from these:

(1) IIT, Madras was provided with experts, technicians and equipment for guiding post-graduate studies and research and for setting up the different laboratories of the institute;

(2) Prototype Production-cum-Training Centre, Okhla got machinery, experts, training facilities for Indian instructors, manufacturing rights for the production and sale of precision lathes, universal tools and grinding machines, handlever machines as well as alloy steel;

(3) Indo-German Agricultural Development Projects in India have been provided with experts, agricultural products like, fertilizers, agricultural implements, seeds, equipment for soil testing laboratory;

(4) Television Centre of All India Radio, New Delhi received equipment and services for installation;

(5) Institute for the Training of Foreman (Mister) Training Institute at Bangalore is to get an aid of Rs. 9.36 million.

(6) Central Staff Research Training Institute, Calcutta has been authorised an aid of Rs. 3.45 crores; and

(7) National Development Corporation and Neyveli Lignite Corporation received training facilities in steel manufacture. Telecommunication engineering, wagons, designs, tourism and hotel management, green algae technology and food science are other facilities.

The most fundamental aspect of aid is to promote private enterprise. Another innovation is the advance commitment of aid.

Britain

The British Government's assistance is (a) in the form of long-term loans through Aid India Consortium since its formation in 1958 and (b) technical assistance in the form of grants under Technical Cooperation Scheme of the Colombo Plan since its inception in 1951. The total value of aid extended upto December 1974 is Rs. 1,122.4 crores, of this loans are Rs. 1,110.7 crores and grants Rs. 11.7 crores. The utilisation figures stand at Rs. 1,034.0 crores; of which loans utilisation is Rs. 1,022.3 crores; of grants, Rs. 11.7 crores.

The loan assistance has been given for project and non-project uses. The following major projects have received economic assistance: (1) Durgapur Steel Plant has received a total allocation of Rs. 846 million out of which Rs. 207.0 million was supplied by a group of British Banks. The rated ingot steel making capacity of one million tonnes per annum was reached in early 1963; (2) Heavy Electricals Bhopal has received a total allocation of approximately £ 29.5 million upto March 31, 1969, for producing transformers, switchgears, contral gears, electric tractor equipment, steam and water turbines; (3) Security Paper Mills Hoshangabad is designed to produce 2,700 tonnes per annum; (4) Oil India Ltd. for setting up an oil pipeline from Upper Assam oil fields to Gauhati and for purchasing drilling equipment for oil exploration; and (5) Fertilizer Plant Namrup (Naharketiya Assam) for meeting the foreign exchange cost of plant and equipment.

IBRD

The total lending by IBRD upto March 1974 is Rs. 674.7 crores and its utilisation is of the same amount.

India has been receiving aid in the form of long term loans from the World Bank for public and private sectors. Besides loan giving, the World Bank also acts as a secretariat of the Aid India Consortium.

The IBRD charges 7½ per cent per annum interest on its loans, currently. The period of repayments is 25 to 30 years with a grace period of 5 to 10 years.

A purpose-wise distribution of loans given by the World Bank is as follows:

Agricultural Development	Rs. 151.5 million
Aviation	Rs. 42.0 million
Coal Industry	Rs. 362.1 million
Power Generation and Transmission	Rs. 1,086.7 million
Ports	Rs. 437.3 million
Railways	Rs. 2,833.5 million
Telecommunication	Rs. 1,206.3 million
Steel Plants	Rs. 1,187.9 million
Other Industries	Rs. 1,498.2 million
Multipurpose Projects	Rs. 78.8 million

The debt relief amounted to Rs. 112.5 million for 1967-71.

The World Bank also extended a grant for exploring the feasibility of second bridge over Hooghly River and foreign exchange worth £ 750,000 for studying the coal transport problem. It also bore a cost of £ 335,000 for a transport survey in the eastern region.

IDA

IDA has extended credits of Rs. 1,683.0 crores upto March 1974 and their utilisation stands at Rs. 1,150.3 crores upto the same date. The IDA, as an affiliate of the Bank, was established in 1960 for LDCs whose needs for outside capital was greater than their ability to service conventional loans. Loans are of 50 years maturity bearing no interest. Repayment is in foreign exchange; the amortisation is to begin after a ten year period of grace.

The IDA credits have been utilised for highway construction and improvement, tubewell irrigation, irrigation projects, flood protection and drainage, power expansion, telecommunication, railway improvement and agricultural projects.

IDA gives project and non-project aid. The non-project aid which is in the form of industrial import credits, is used for financing imports of a wide variety of maintenance items.

Austria

The authorisation of Austrian aid upto March 1974 is Rs. 24.3 crores, out of which Rs. 23.1 crores are loans and Rs. 1.2 crores are grants. Practically all loans have been utilised.

Austria has been extending the financial assistance to India since 1962-63. The credits extended are: (a) Government credits; and (b) suppliers credits. Debt reliefs, in the form of refinancing credits and reduction in the rate of interest, have also been signed.

The General Credits were intended for the purchase of capital equipment, components, raw materials and also for services from Austria for India's developmental programmes in

public and private sectors. Except for payments made upto June 30, 1964, for which interest is 6 per cent per annum, the interest rate on all Austrian Credits is 5½ per cent. The repayment of all loans is spread over between 12-20 years with an initial moratorium of 2 to 7 years.

The Austrian suppliers' credits are spread over a period of ten years, the first instalment falls due on shipment. The rate of interest is 6½ per cent per annum. These credits are available for the import of capital goods only. The debt relief provided by the Austrian Government for the period 1968-71 was £ 5.13 million.

Belgium

The total assistance extended by Belgium upto March 1974 is Rs. 47.6 crores and is in the form of loans. The utilisation stands at Rs. 26.9 crores.

Belgium has been extending foreign exchange assistance since 1962-63 for the import of capital goods.

The Government to Government credits have been extended since 1966-67 for the import of fertilizers, rolls for steel mills, zinc dust, calcium citrate, special type of glass, X-ray films, etc. The terms of credit have been progressively softer. During 1966-68, credits carried interest at 3 per cent per annum and had a repayment period of 20 years and grace period of 5 years. Subsequent credits during 1961-71 carry interest at 2 per cent per annum and have a repayment period of over 30 years including a grace period of 10 years.

The suppliers' credit upto March 31, 1971 amounts to Rs. 330.0 million. The rate of interest on it does not exceed 6 per cent per annum, though in some cases it is 6.75 per cent per annum. The duration of credit is 12 years after the placing of orders.

The total debt relief assistance for 1968-71, provided by the Belgian Government, is Rs. 24.75 million. The debt relief takes the shape of cash assistance to the Government of India and is drawn in one lump sum for a year.

Canada

The authorisation of Canadian aid upto March 1974 is Rs. 772.2 crores, of which loans are Rs. 388.9 crores and grants Rs. 383.3 crores. The utilisation stands at Rs. 711.2 crores, out of which loans are Rs. 325.5 crores. All authorised grants have been utilised.

Canada is one of the oldest aid giving countries to India as a participant of the Colombo Plan programme and as an original member of the Aid India Consortium since its formation. Aid received from Canada, upto the end of the Second Plan, was nearly a grant, exception being two wheat loans of Rs. 229 million.

The Canadian assistance has covered such wide fields as control of locusts and agricultural pests, aerial surveys for oil prospecting and atomic research. Canadian equipment has gone into hydro-electric projects at Mayurakshi in West Bengal, Umtru in Assam and Kundah in Tamil Nadu. The Canada-India reactor -- a joint Indo-Canadian endeavour, is a powerful tool for research for peaceful purposes. Canada has also strengthened

the Meterological communication. The supply of chassis has strengthened the transport system in Bombay and Canadian locomotives and sleepers have helped to rehabilitate the Railway systems. Rural electrification, non-ferrous metals, asbestos and newsprint are other forms of Canadian aid. During the third plan, Canadian pledges included grants and medium term credits extended through the Government-owned Export Development Corporation of Canada. These credits are repayable over a period of 15 to 20 years, inclusive of a grace period of 3 to 6 years along with interest at 6 per cent per annum. Since 1964-65, the loan assistance has a repayment period of 50 years inclusive of grace period of 10 years and a service charge of ¾ per cent per annum. The terms are the softest available to India.

Canadian grants include wheat, fertilizers, newsprint, asbestos and non-ferrous metals. The supply of much needed raw materials and commodities have greatly contributed to the pace of industrial development in India.

Canada has extended debt relief to India by writing off Rs. 69.4 million against two wheat loans, postponement of principal payments and cash grants to offset interest charges.

Canadian Government have also provided technical assistance in the form of services of Canadian experts and training facilities for Indians in Canada.

Denmark

Denmark has been extending foreign exchange assistance to India by way of loans since 1963 and also after it became a

Consortium member in 1968. The total assistance by March 1974 is Rs. 17.6 crores, of which the loans are Rs. 16.7 crores and grants Rs. 0.9 crores. The utilisation is Rs. 15.8 crores, out of which utilisation of loans is Rs. 14.9 crores and of grants, it is Rs. 0.9 crores.

Aid from Denmark consists of general purpose credits and food loans. The general purpose credits carry interest at 4-5 per cent and are repayable over 10 to 15 years with a grace period of 2 to 5 years.

The repayments under the first and second credits are in rupees to be deposited in a special account and intended to finance the rupee expenditure of mutually agreed socio-economic projects in India.

The food loans are for the import of milk powder, foodstuffs and agricultural necessities of Danish origin. The credits are interest free, repayments ranging from 20 to 25 years and grace period from 5 to 7 years.

Denmark has also provided to India, on grant basis, 20,250 metric tons of wheat f.o.b. Danish ports as part of Denmark's contribution under International Grains Arrangement.

France

The authorised and utilised aids by France, upto March 1974 are Rs. 318.4 crores and Rs. 261.8 crores, respectively. The French assistance started within the ambit of Aid India Consortium. France has given credits outside the Consortium for Oil Exploration Programme (Rs. 63.3 million) and for Nasik Thermal Power Station (Rs. 132.30 million).

The French assistance upto the end of the Third Plan was available for import of capital goods on suppliers' credit terms. The major beneficiaries from these credits are as follows:

Cement Machinery. The allocation here is for the import of plant and machinery for various cement plants and components and balancing equipment for indigenous manufacture of complete cement making machinery.

Industrial Development. The amount here is allocated to chemical plants, equipment and components for Hindustan Machine Tools. Another major beneficiary is Khetri Copper Project. In aviation, French credit has been made for acquiring 6 caravelle aircraft. In power, the credits have been used for circuit breakers, switchgears and transformers required by State Electricity Boards, turbines and generating sets. In railway, the credits have been used for the components and manufacture of electric locomotives for railways. In light houses, optical and signalling equipment, cast iron towers, light vessels, lighting equipment have been financed. In agriculture and irrigation, earth moving equipment for various irrigation projects and the Dandakarnya Project have been financed.

The credits available since 1966-67 are for project and non-project imports and debt relief. The project and non-project imports are roughly equal. The non-project portion has been used for fertilizers, raw material and for components, spares and light equipment.

The terms of repayments on the first five tranches have been more or less commercial, being 5.25 to 6.08 per cent. In 1970-71, the repayment period and grace years remained the same

but the rate of interest was brought down from 3.5 per cent to 3 per cent per annum.

France has provided debt relief of Rs. 108.54 million during 1968-71. The loans for 1968-71 are repayable in 12 years, with a grace period of 3 years. The interest chargeable on all these debt relief loans is 3.5 per cent per annum.

France has also given special credits to Oil and Natural Gas Commission to the extent of Rs. 60 million in addition to the Consortium pledges. It has also given a special credit (Rs. 173.85 million) at 5.25 per cent per annum for Nasik Thermal Plant. It has also sanctioned a special credit to IFC equal to £ 3 million.

The French Government have also made available to India services of technicians and provided training to Indian nationals in various fields.

Italy

The total amount of loans from Italy upto March 1974 is Rs. 161.6 crores. The utilisation stands at Rs. 130.7 crores. Italy has been extending credits to finance the import of capital equipment, services and commodities since 1962-63. Leaving an amount of £ 14 million, the credits are in the nature of suppliers' credits.

The suppliers' credits are on deferred payment extended by the Italian exporters under the State Guarantee Scheme to Indian importers. There are no Government to Government credits.

The terms of the credit are: 3 per cent to 5 per cent of the contract value payable on placing the order; another 5 per

cent in free foreign exchange payable on delivery; the balance of 90 to 92 per cent payable over a period of 10 years annually or half yearly. The rate of interest does not exceed 6 per cent.

The credits have gone into the following sectors:

ENI Credit was to finance installation of pipe lines from Barauni to Delhi and Calcutta, a gas fractionation plant, a liquid petroleum gas bottling plant, oil exploration equipment and technical assistance for the development of Indian oil resources. The Montecatani loans are for Madras Aluminium Company Limited.

The Italian Government extended the first non-project assistance of Rs. 15.00 million for the import of fertilizers in 1966-67. The loan is repayable over 16 years inclusive of a moratorium of 3 years. The interest charges are 2.5 per cent per annum. The Italian Government has also provided debt relief by way of debt refinancing and cash assistance. Some more relief (Rs. 54.75 million) is expected when the financial conventions, for which the agreements that exist, are signed.

Japan

Japan has been extending credits for India's development programmes since 1958.

The total aid extended by Japan is Rs. 595.6 crores, of which loans are Rs. 595.1 crores and grants Rs. 0.5 crores. The utilisation figures are Rs. 539.6 crores, of which utilisation of grants is Rs. .5 crores and of loans is Rs. 539.1 crores. Japan has also extended suppliers' credit for the purchase of textile machinery, ships and capital goods, in addition to the contribution as a member of Aid India consortium.

The credit extended during the second plan period was mostly available for power transmission equipment, ships, trucks and tractors, railways, plant and machinery for the manufacture of rayon, pulp, fertilizer, caustic soda and machine tools.

In the Third Plan, 53 per cent of the aid was for the import of non-project items like equipment for transmission and distribution of electricity cables, insulators, trucks, tanks, tractor components, power tillers, marine diesel engines and maintenance requirements of Indo-Japan ventures. The balance of about 47 per cent was allocated to projects.

Other projects which have benefitted from the Japanese credits are Gorakhpur and Gujarat Fertilizer Projects, FACT Alwaye (Kerala), Durgapur Alloy and Special Steel Plant and TISCO Roll Foundry Projects.

During the Second Plan, the repayment period was 13 years with a grace period of 5 years and interest charges ranging from 6¼ per cent to 6¾ per cent. In the Third Plan, the repayment ranges from 13 to 18 years with a grace period of 3 to 5 years and the same rate of interest. In the credits for 1968-70, there is a slight fall in the rate of interest.

The Japanese Government have also provided debt relief in the form of debt rescheduling of earlier loans. The repayments falling due to earlier year credits are not actually payable but are postponed over a further period of years.

Japan has also made available suppliers' credit for the purchase of ships, import of textile machinery, capital goods for public and private sector industries. Under the suppliers' credit the Government of India is not given loan. The Indian importers negotiate suppliers' credit with Japanese exporters

directly. The interest charges on suppliers' credit are 6 per cent per annum and repayments are from 5 to 10 years.

Japanese Government grants have gone into Indo-Japanese Prototype Production Training Centre, Howrah, Marine Products Processing Training Centre, Mangalore and in the establishment of Japanese Agricultural Demonstration Farms. Under Colombo Plan, the Government of Japan have provided services of experts and training facilities in Japan to Indian nationals. The training facilities are mainly in small scale industry, fertilisers, fisheries, agriculture, engineering and plant protection.

Netherlands

The Netherlands Government have been giving assistance to India since 1962-63 within the framework of Aid India Consortium. The total assistance upto March 1974 is Rs. 110.8 crores, of which loans are Rs. 107.8 crores and grants Rs. 3 crores. The utilisation stands at Rs. 101.2 crores, of which loans are Rs. 98.2 crores and grants Rs. 3 crores.

The loans are of two types, namely, (1) General Purpose loans; and (2) Financial Export credits. The General Purpose loans are for the import of goods from Netherlands. These are to be paid in 25 years and bear an interest rate of 5½ per cent (reduced to 3 per cent since 1965-66). The General Purpose loans are available for public and private sectors and have gone into iron and steel, fertilizers, equipment for ports and shipyards, components for Bharat Electronics, equipment for irrigation and power projects, tyre cord for tyre industry,

equipment for wireless sets, aircrafts' purchase, equipment for sugar industry, pesticides, chemicals, equipment for ONGC and raw materials for non-priority industry.

The financial (export) credits are in the nature of deferred payment loans given by the Dutch suppliers to the Indian importers. These are guaranteed by the Dutch Credit Insurance Company. These are available for the import of capital goods only. The rate of interest is 10 per cent and the repayment is in free foreign exchange starting with the imports.

The Netherlands Government have extended debt relief of Rs. 13.13 million by giving relief in the interest payment. The payment of interest was lowered from 5½ per cent to 3 per cent in case of these loans.

The Netherlands Government gave grant for reclamation and desalination of unserviceable land along with the coast of Saurashtra for training-cum-production centre at Lucknow, agricultural improvements in draught affected parts of Sholapur district, establishment of Indian Photo Interpretation Institute, Polytechnics in Northern regions of India, development of the Institute of Catering Technology and Applied Nutrition at Calcutta. Besides this, fellowships have been provided to Indian nationals for studies in Netherlands in the above items.

Norway

The total amount of aid received from the Government of Norway upto March 1974 is Rs. 10.1 crores, of which the grants are Rs. 8.6 crores and loans of Rs. 1.5 crores. The utilisation is Rs. 9.9 crores.

The Indo-Norwegian project is for the development of fisheries in India. The aims of the project are raising the standard of living of the fishing community by introducing improved fishing methods and efficient distribution of fresh fish; and (2) improvement in the health of fishing population. The project has been successful in introducing mechanised boats, training to fishermen, setting up ice factory and refrigeration plant at Neendakara, demonstrations of modern methods of marketing, establishing fishermen's cooperatives and health centre at Neendakara, establishing modern sea house (godown), and ice-cum-freezing plant, boat building yards and fishermen's training centre, deep sea and exploratory fishing, a ship way and mechanical workshop for docking and repairing facilities to vessels. The project has gone a long way in raising the living standards of fishermen.

The other form of assistance is the import of fertilizers on grant basis. Besides, Norway has helped in catering and food crafts, fish processing at Food Technology Training Centre, Mysore and training of Auxiliary Nurse midwives in Bihar. The Government of Norway have provided technical assistance in the form of experts and training to Indian students in agriculture, natural sciences, engineering and medical sciences.

Sweden

Swedish aid to India by March 1974 amounts to Rs. 124.4 crores, of which Rs. 47.0 crores are grants and Rs. 77.4 crores are loans. The utilisation of the aid is Rs. 46.5 crores, out of which the utilisation of loans is Rs. 38.5 crores and of

grants it is Rs. 8.0 crores. Sweden joined the Aid India Consortium as a full member in 1969.

I. USSR and East European Countries

The total loan authorisation of these countries upto March 1974 is Rs. 1,002.4 crores. The grants are Rs. 9.5 crores till March 1974. The country-wise break-up is given below:

USSR

The total aid received from USSR upto March 1974 is Rs. 748.6 crores, of which the loans are Rs. 739.6 crores and grants are Rs. 9.0 crores. The utilisation figures for loans and grants are Rs. 545.6 crores and Rs. 7.8 crores, respectively.

The Russian assistance began in 1955 with a credit of Rs. 1,019.6 million for the Bhilai Steel Plant. The aid is directed to basic and heavy industries and development projects. Various important projects like Bhilai and the Bokaro Steel Plants, Heavy Machine Building Plant at Ranchi, Coal Mining Machinery Plant at Durgapur, Heavy Electrical Plant at Ranipur, Oil Refineries at Barauni and Koyali, Power plants at Korba, Neyveli, Singarauli, Bhakra and Lower Sileru, Oil Exploration at Cambay and three Drug Projects have received the USSR aid.

India received the only credit of Rs. 1,019.6 million during the First Five Year Plan for Bhilai Steel Plant from the USSR. During the Second Five Year Plan, 5 agreements were signed for a total of Rs. 5,040.8 million for various projects, such as: (1) Heavy Machine Building Plant with the structural fabrication to produce steel melting plants, cranes, rolling mills equipment, excavators, metal and drilling rigs, forgings, metallurgical

equipment and technical structurals for steel plants and other heavy industries; (2) The setting up of Thermal Power Stations at Neyveli, Singarauli, Expansion of Korba Thermal Power Station and Bhakra Right Bank Power Station; (3) Coal Mining Machinery Plant, Durgapur which has undertaken diversification and is designed to produce coal mining machinery. The projects set up at Banki and Monkpur are expected to produce non-coking coal and Kathua Coal Washery is expected to produce about 3 million tonnes of raw coal every year; (4) The three drug projects receiving Soviet aid are Antibiotics projects, Rishikesh (U.P.), Synthetic Drug Projects, Hyderabad (Andhra Pradesh) and Surgical Instruments Plant, Madras. Soviet specialists have been assisting the Oil and Natural Gas Commission in the exploration and development of India's oil and natural gas resources.

During the Third Plan, the only credit agreement signed was for the setting up of Bokaro Steel Plant with a capacity for the production of 1.7 million tonnes rising to 4 million tonnes of steel ingots and .88 million tonnes of foundry grade pig iron per year. The unit will ultimately produce flat products of steel like hot and cold rolled strips and sheets, plates, etc.

The aid of 300 million roubles signed in 1966-67 was for the construction of certain enterprises and projects for steel, non-ferrous metals, coal, and ore mining and oil exploration, power and other industries proposed for the implementation of the Fourth Plan.

An advantage of Soviet aid is extending credits in advance. Soviet credits carry an interest rate of 2½ per cent and are repayable over a period of 12 years except the drug

project credit repayable in 7 years. The repayment in this case is one year after the completion of deliveries of equipment. The payment of interest and repayment of principal are made in rupees which the Soviet authorities utilise for the purchase of goods in India. Interest is charged for the amount drawn and from the date of drawal.

The USSR grants have been for the supply of machinery for Central Mechanised Farm, Suratgarh, for five Central State Farms for popularising the mechanisation of agriculture, training of technical and operational staff for agricultural machinery. The Indian Institute of Technology, Bombay also received a free gift of equipment worth Rs. 5.7 million. The Soviet Government have also assisted the National Smallpox Eradication Programme by free supplies of dried smallpox vaccine. Besides the above, the equipment, apparatus, medical literature, drugs, ambulance cars, needed by the Paediartric Centre of K.S. Children's hospital, New Delhi, were received as a gift.

Yugoslavia

The assistance given by Yugoslavia upto March 1974 is Rs. 49.3 crores. The first agreement was signed in early 1960. The main items of imports under the Yugoslavian credits have been ships, motor cargo ships and bulk carriers and equipment for power projects under various State Electricity Boards, equipment for power projects like Periyar, Sholayar, Paramonbikulam and Kodayar, Yumuna stage, Kalakote, Kanpur - Panki, Kandla and the Upper Sileru Power Station.

The first credit carried down payments of 10 per cent and the balance 80 per cent carried interest at 3 per cent per

annum and repayment of principal made in equal and consecutive semi-annual instalments. In the case of second credit, two down payments of 7½ per cent and 5 per cent are payable in the case of ships and capital goods, respectively. The balance of 85 per cent or 90 per cent carries interest at 3 per cent per annum and is repayable in 9 years in the case of ships and equipment for ships and 11 years in case of other capital goods.

The repayment of principal and payment of interest charges are to be made in non-convertible Indian rupees for which Indian goods are purchased for export to Yugoslavia.

Bulgaria

Bulgaria started giving aid to India with effect from May 1967. The total amount of loans stands at Rs. 11.3 crores. The Bulgarian credit can be used for the import of equipment for food processing, dressing, factories for lead, zinc, copper and iron ores, production of sulphuric acid, power tillers, agricultural implements, plant and machinery for the manufacture of mopeds, electric motors, electric hoists and transformers, port equipment, ships, repair workshops, ceramic plants and pumping stations for irrigation, etc.

The credit carries an interest of 2.5 per cent per annum. in case of Government credit. The terms of repayment are as under: (1) 7½ per cent of the f.o.b. value of each contract within 60 days from date of concluding the contract; (2) 7½ per cent of the f.o.b. value after presentation of documents provided in the contract; (3) Balance of 85 per cent of the f.o.b. value in 11 equal instalments, the first instalment being payable one year after the shipment of the last essential

equipment necessary for putting the plant into operation.

The suppliers' credit carries an interest of 3 per cent per annum payable together with the other instalments. The terms of repayment of suppliers' credit are as under: (1) 7½ per cent f.o.b. value of the equipment to be paid within 30 days after coming into force of the respective contracts; (2) 7½ per cent of f.o.b. value of the equipment as well as freight and insurance to be paid after submitting the shipping documents stipulated in the respective contracts; (3) Balance 85 per cent of f.o.b. value in 9 equal annual instalments, first payable one year after the shipping of last essential equipment.

The terms of assistance are sufficiently hard although the assistance is devoted to building the capital base in this country. The repayment of the principal and of the interest which are in Indian rupees makes the terms of assistance somewhat soft.

Czechoslovakia

The total Czechoslovakian aid by March 1974 stands at Rs. 141.5 crores and the utilisation figures stand at Rs. 73.8 crores.

The credits of Czechoslovakian Government amount to Rs. 962 million for financing the import of machinery, industrial equipment and components for development projects.

The Czechoslovakian credits are being used to finance, among others, the requirements of the Foundry Forge Plant and Heavy Machine Tools Factory at Ranchi, High Pressure Boiler Plant at Tiruchirapalli, the Heavy Power Equipment Plant at

Hyderabad and Heavy Plate and Vessels, Visakhapatnam and Machine Tools Plant at Ajmer.

The credits carry interest at 2½ per cent per annum. The first credit is repayable in 8 equal yearly instalments, the first instalment being payable upon the expiry of one year after the presentation of the final invoice. The second credit is repayable in 12 equal yearly instalments, the first instalment being payable one year after the presentation of the final invoice in respect of the plant in question. In the case of components, however, the repayment is in 8 equal yearly instalments. The repayment and interest are in rupees to be used for the purchase of Indian goods for export to Czechoslovakia.

The agreement between Central Machine Tools Institute, Bangalore and M/s. Techno-Export Prague, Czechoslovakia has a gift of Rs. 9.45 million for technical assistance, design development and standardisation of machine tools, training of designers for machine tools industry and research in designing and metal cutting, etc.

Hungary

The Hungarian Peoples Republic extended a credit of Rs. 250 million on June 15, 1966 to finance the import of plant, machinery equipment for alumina plant, floating pump stations, ore dressing plants, diesel locomotives, manufacturing gas cylinders, steel forging plant, seamless tube mills, etc.

The terms of repayment are: (1) 7½ per cent of f.o.b. value of each contract within 60 days from the contract; (2) 7½ per cent of f.o.b. value within 60 days of the last essential shipment; (3) Balance 85 per cent of f.o.b. value in

10 yearly instalments beginning one year after the date of shipment of/last the essential consignment.

The Government credit has 2½ per cent interest per annum while suppliers' credit has 4½ per cent. The repayment is in non-convertible Indian rupees to be used for the purchase of Indian goods for export to Hungary.

Poland

The Polish Government have extended credits equal to Rs. 36.9 crores by March 1974. The utilisation stands at Rs. 27.9 crores.

All the credits carry interest at 2½ per cent per annum. The repayment varies from 8-12 years. The repayment begins one year to 3 years after the date of invoice. Both the payment of interest and repayment of principal are made in rupees which are spent by the Polish authorities for the purchase of Indian goods.

Polish aid has gone into power generation; (2) for the development of coal mines and washeries; and (3) Cellular concrete plants. The power generation stations are at Barauni, Paras and Bhusaval. The coal mines and washeries receiving aid are Sudamdih, Monidih and Giddi. The capacity of these coking mines is 4.26 million tonnes and for 50-60 years.

III. Others -

Australia

Australian aid started from 1951 and has been in the form of outright grants under the auspices of the Colombo Plan. The total is Rs. 53.4 crores and all the grant has been utilised.

Australian grants are devoted to Emergency Food Aid, Economic Development and Technical Assistance. The Australian Government gave a gift under Food Aid Convention of the International Grains Arrangement as a contribution to the buffer stock of foodgrains by India.

In Economic Development Projects, Australia has equipped bakeries in Madras, Bombay, Ernakulam and has been supplying spare parts and ancillary machinery. Australia has supplied India with four million pounds weight of wool and 300 heads of stud dairy cattle in 1970-71 for distribution to breeding farms in India. It has also supplied equipment, expert services and sheep for the sheep breeding farm at Hissar.

Technical Cooperation consists of wool pressing and wool testing, mobile cinema vans, hospital launch, welding electrodes for the Neyveli Lignite Corporation, road building machines, laboratory equipment for the Central Arid Zone Research Institute, Jodhpur and medical workshop at AIIMS, New Delhi. Australia has also provided a large number of fellowships for Indian nationals for post-graduate and specialised studies in agriculture, animal husbandry, forestry, steel engineering, medical and public health service.

The counterpart funds generated by the sale of wheat, electrolytic copper, sulphate of ammonia, fertilizers, skimmed milk powder were allocated to different mutually agreed projects like Tungbhadra Project, wheat godown at Sanatnagar, Jodhpur laboratory, regional medical workshops, State sheep breeding farms and Barauni Fertilizer Project in Bihar.

New Zealand

New Zealand started providing technical and capital assistance to India since 1951-52. The total assistance from New Zealand upto March 1974 amounts to Rs. 4.5 crores. The assistance has taken the shape of capital aid, training of students and provision of experts.

Capital aid assistance has been primarily in the field of dairy development in eleven cities. Other beneficiary is All India Institute of Medical Sciences. Other provisions of the aid are in the form of jet boats, milk powder, agriculture equipment, seeds testing equipment for NDRI, Karnal, Aarey Colony Hostel, Bombay, and Harnghatta Dairy Farm, Calcutta.

Technical assistance in the form of expert services and training to Indian students in New Zealand have also been provided.

Switzerland

The Swiss Government have given aid worth Rs. 44.3 crores upto March 1974 in the form of two credits in 1966. No new credits have been signed after 1966. These have been allocated to various public and private sector projects like Upper Sileru, circuit breakers, textile machinery, capital goods and components for private industries, machine tools equipment, railways, turbo alternator sets for sugar industries. The rate of interest is very high ranging between 10-10.25 per cent and the repayment period is 10 years. The Government credit carries interest at 3 per cent and is repayable in 15 years from the date of each drawal with a grace period of 10 years.

Some of the projects covered are logging training centre, Batote, Kashmir for imparting training to forest officers, Indo-Swiss Training Centre, Chandigarh and cattle breeding-cum-dairy centre in Munnar, Kerala. The Swiss Government have provided equipment and expertise for jungle clearing, agricultural implements and agricultural inputs like seeds, fertilizers, irrigation and tractor workshops, well drilling, aid to All India Institute of Medical Sciences, technical education; aided agricultural development, irrigation, secondary, college education and health. The Swiss Government have also offered a number of scholarships mainly for the highly specialised training.

APPENDIX

Table 1

Authorisations of External Assistance Classified by Source

(Rs. crores)

Source	Type of Assistance	Upto end of Third Plan	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
1	2	3	4	5	6	7	8	9	10	11
1. Consortium Members		5048.5	1188.7	699.1	943.0	627.6	759.1	962.9	676.2	1069.2
(a) Loans		3181.1	727.9	387.2	753.1	421.8	705.4	774.5	639.6	1028.1
(b) Grants		356.6	68.1	8.4	64.6	19.3	53.7	33.7	36.6	41.1
(c) PL 480/665 etc. assistance:										
(i) repayable in rupees		1510.8	392.7	235.9	71.6	73.6		22.5		
(ii) repayable in convertible currency				67.6	53.7	112.9		96.2		
Country-wise distributions:										
(i) Austria	Loans	8.4	3.5	3.5	0.7	0.8	1.1	0.7	2.1	2.3
	Grants				0.4	0.4	0.4			
	Total	8.4	3.5	3.5	1.1	1.2	1.5	0.7	2.1	2.3
(ii) Belgium	Loans	11.4		2.8	9.4	2.3	10.1	3.0	3.6	5.0
(iii) Canada	Loans	45.6	41.3	47.8	26.0	49.5	26.9	39.1	55.9	56.8
	Grants	174.5	57.7	7.1	52.8	7.0	31.9	27.9	10.8	13.6
	Total	220.1	99.0	54.9	78.8	56.5	58.8	67.0	66.7	70.4
(iv) Denmark	Loans	2.4	3.2	3.0	4.0				4.1	
	Grants					0.8			0.1	
	Total	2.4	3.2	3.0	4.0	0.8			4.2	
(v) France	Loans	67.1	21.0		40.7		41.9	24.0	66.1	56.2
	Grants					1.4				
	Total	67.1	21.0		40.7	1.4	41.9	24.0	66.1	56.2
(vi) West Germany	Loans	442.5	48.2	48.8	45.4	46.8	51.8	51.4	58.3	87.3
	Grants	2.7	1.7	0.6	4.0	6.5	3.5	3.9	5.0	6.7
	Total	445.2	49.9	49.4	49.4	53.3	55.3	55.3	63.3	94.0
(vii) Italy	Loans	81.0	23.3		4.1	17.5	6.0	6.0	10.1	13.6

Table 1 (contd)

1	2	3	4	5	6	7	8	9	10	11
(viii) Japan	Loans	165.4	33.3	39.0	33.8	33.8	24.3	110.1	59.1	96.3
	Grants	0.5								
	Total	165.9	33.3	39.0	33.8	33.8	24.3	110.1	59.1	96.3
(ix) Netherlands	Loans	22.8	8.3	8.3	6.8	8.3	8.3	10.4	15.3	19.3
	Grants				0.4	0.5	0.5	0.5	0.5	0.6
	Total	22.8	8.3	8.3	7.2	8.8	8.8	10.9	15.8	19.9
(x) Norway	Loans				1.5					
	Grants	5.1	2.2				1.3			
	Total	5.1	2.2		1.5		1.3			
(xi) Sweden	Loans	2.2	3.5		10.9		18.1	3.7	26.5	12.5
	Grants	3.8	2.0		0.8				20.2	20.2
	Total	6.0	5.5		11.7		18.1	3.7	46.7	32.7
(xii) U.K.	Loans	356.2	75.9	59.4	64.8	98.1	84.8	98.1	108.8	164.6
	Grants	1.8	0.1	0.1	5.1	2.2	1.0	1.4		
	Total	358.0	76.0	59.5	69.9	100.3	85.8	99.5	108.8	164.6
(xiii) U.S.A.										
(a) Loans		1251.5	235.6	144.6	400.1	35.0	264.9	48.5	30.2	22.9
(b) Grants		168.2	4.4	0.6	1.1	0.6	15.1			
(c) PL 480/665 etc. assistance:										
(i) repayable in rupees		1510.8	392.7	235.9	71.6	73.6		22.5		
(ii) repayable in convertible currency				67.6	53.7	112.9		96.2		
Total		2930.5	632.7	448.7	526.5	222.2	280.0	167.2	30.2	22.9
(xiv) I.B.R.D.		449.5	1.3	30.0	11.3	41.6	41.3	45.0		54.7
(xv) I.D.A.		275.1	229.5		93.8	88.1	125.9	334.5	199.5	436.6

Table 1 (contd.)

1	2	3	4	5	6	7	8	9	10	11
II. U.S.S.R. & East European Countries	Loans	604.9	306.2	11.3						80.0
	Grants	5.4	2.5	0.8	0.7					
	Total	610.3	308.7	12.1	0.7					80.0
Country-wise distribution										
(i) Bulgaria	Loans			11.3						
(ii) Czechoslovakia	Loans	61.1								80.0
	Grants	0.4								
	Total	61.5								80.0
(iii) Hungary	Loans		25.0							
(iv) Poland	Loans	36.1								
(v) U.S.S.R.	Loans	489.6	250.0							
	Grants	5.0	2.5	0.8	0.7					
	Total	494.6	252.5	0.8	0.7					
(vi) Yugoslavia	Loans	18.1	31.2							
III. Others	Loans	22.9								21.4
	Grants	30.0	9.1	7.6	3.2	6.7	2.8	2.3		
	Total	52.9	9.1	7.6	3.2	6.7	2.8	2.3		21.4
Country-wise distribution										
(i) Australia	Grants	25.7	8.9	7.6	3.2	2.9	2.8	2.3		
(ii) New Zealand	Grants	4.3	0.2							
(iii) Switzerland	Loans	22.9								21.4
(iv) European Economic Community	Grants					3.8				
GRAND TOTAL:		5711.6	1506.5	718.8	946.8	634.3	761.9	929.2	676.2	1170.6
(a) Loans		3808.8	1034.1	398.5	753.1	421.8	705.4	774.5	639.6	1129.5
(b) Grants		392.0	79.7	16.8	68.4	26.0	56.5	36.0	36.6	41.1
(c) PL 480/665 etc. assistance										
(i) repayable in rupees		1510.8	392.7	235.9	71.6	73.6		22.5		
(ii) repayable in convertible currency				67.6	53.7	112.9		96.2		

Source: GOI, Economic Survey, 1974-75, pp. 106-7.

Table 2

Utilisations of External Assistance Classified by Source

(Rs. crores)

Source	Type of Assistance	Upto end of Third Plan	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
1	2	3	4	5	6	7	8	9	10	11
Consortium Members		4158.5	1051.0	1124.4	810.0	774.8	733.1	811.6	640.3	814.8
(a) Loans		2446.9	611.5	731.0	591.4	586.7	601.9	651.8	624.0	794.4
(b) Grants		308.4	79.9	51.7	61.0	18.6	42.2	47.9	12.0	20.4
(c) PL 480/665 etc. Assistance:										
(i) repayable in rupees		1403.2	359.6	310.9	84.5	107.5	37.7	8.8		
(ii) repayable in convertible currency				30.8	73.1	62.0	51.3	103.1	4.3	
Country-wise distribution:										
(i) Austria	Loans	4.7	3.7	3.2	3.2	2.7	1.7	0.7	1.8	2.4
	Grants				0.4	0.4	0.4			
	Total	4.7	3.7	3.2	3.6	3.1	2.1	0.7	1.8	2.4
(ii) Belgium	Loans	4.9	Neg	1.9	2.1	2.9	5.1	4.2	3.0	2.8
(iii) Canada	Loans	27.3	11.9	18.4	29.7	39.4	46.5	49.4	55.3	47.6
	Grants	134.4	68.3	45.5	48.2	10.0	34.6	27.8	5.6	12.3
	Total	161.7	80.2	63.9	77.9	49.4	81.1	77.2	60.9	59.9
(iv) Denmark	Loans	0.6	2.8	2.9	1.5	1.2	1.4	1.4	1.0	2.1
	Grants					0.8			0.1	
	Total	0.6	2.8	2.9	1.5	2.0	1.4	1.4	1.1	2.1
(v) France	Loans	21.0	4.3	32.3	15.6	15.6	36.8	44.8	39.1	52.3
(vi) West Germany	Loans	339.6	63.6	67.6	57.6	61.3	53.6	68.2	81.8	81.4
	Grants	2.5	1.6	0.6	4.0	6.7	3.5	3.9	5.0	6.2
	Total	342.1	65.2	68.2	61.6	68.0	57.1	72.1	86.8	87.6
(vii) Italy	Loans	11.6	0.2	1.5	54.4	25.8	10.7	12.0	13.5	1.0
(viii) Japan	Loans	112.9	30.2	46.7	68.0	45.3	36.5	41.8	62.0	95.7
	Grants	0.5								
	Total	113.4	30.2	46.7	68.0	45.3	36.5	41.8	62.0	95.7

Table 2 (contd.)

1	2	3	4	5	6	7	8	9	10	11
(ix) Netherlands	Loans	9.5	6.6	8.4	5.7	9.1	16.2	11.6	11.0	20.1
	Grants				0.4	0.5	0.5	0.5	0.5	0.6
	Total	9.5	6.6	8.4	6.1	9.6	16.7	12.1	11.5	20.7
(x) Norway	Loans							0.1	1.0	
	Grants	5.2	0.7	0.5	0.5			1.7		0.2
	Total	5.2	0.7	0.5	0.5			1.8	1.0	0.2
(xi) Sweden	Loans		1.4	1.3	2.1	0.9	4.0	8.4	12.5	7.9
	Grants	3.5	2.2	0.1	0.7				0.4	1.1
	Total	3.5	3.6	1.4	2.8	0.9	4.0	8.4	12.9	9.0
(xii) U.K.	Loans	292.3	90.5	80.6	54.9	81.1	75.3	91.4	125.7	130.5
	Grants	1.3	0.1	0.5	4.9	0.2	3.2	1.5		
	Total	293.6	90.6	81.1	59.8	81.3	78.5	92.9	125.7	130.5
(xiii) U.S.A.										
(a) Loans		1042.0	235.6	269.7	208.7	185.6	227.9	209.2	50.1	68.2
(b) Grants		161.0	7.1	4.5	1.9	Neg.		12.5	0.4	
(c) PL 480/665 etc. Assistance:										
(i) repayable in rupees		1403.2	359.6	310.9	84.5	107.5	37.7	8.8		
(ii) repayable in convertible currency				30.8	73.1	62.0	51.3	103.1	4.3	
Total		2606.2	602.3	615.9	368.2	355.1	316.9	333.6	54.8	68.2
(xiv) I.B.R.D.		380.0	25.8	34.0	30.5	32.1	41.7	29.1	34.9	27.1
(xv) I.D.A.		200.6	134.7	162.5	57.5	83.7	44.5	79.5	132.0	255.3

Table 2 (contd.)

1	2	3	4	5	6	7	8	9	10	11
II. U.S.S.R. and East European Countries	Loans	315.7	55.8	59.1	86.3	72.0	54.9	17.8	17.5	32.0
	Grants	5.4	1.0	1.1	0.7					
	Total	321.1	56.8	60.2	87.0	72.0	54.9	17.8	17.5	32.0
Country-wise distribution:										
(i) Bulgaria	Loans				0.2	0.2				
(ii) Czechoslovakia	Loans	12.6	13.1	7.4	16.1	8.2	1.3	1.4	6.7	6.6
	Grants	0.4								
	Total	13.0	13.1	7.4	16.1	8.2	1.3	1.4	6.7	6.6
(iii) Hungary	Loans						0.7			
(iv) Poland	Loans	11.3	1.0	1.8	1.4	4.2	2.8	2.4	0.6	2.4
(v) U.S.S.R.	Loans	282.1	36.1	46.4	56.6	49.4	36.8	14.0	9.5	14.7
	Grants	5.0	1.0	1.1	0.7					
	Total	287.1	37.1	47.5	57.3	49.4	36.8	14.0	9.5	14.7
(vi) Yugoslavia	Loans	9.7	5.6	3.4	12.0	10.0	13.3		0.7	
III. Others	Loans	6.0	7.6	3.1	2.1	2.0	2.1	2.1	8.4	2.2
	Grants	23.3	16.2	7.9	3.5	7.5	1.3	2.6		0.3
	Total	29.3	23.8	11.0	5.6	9.5	3.4	4.7	8.4	2.5
Country-wise distribution:										
(i) Australia	Grants	19.6	16.0	7.8	3.5	3.7	1.3	2.6		
(ii) New Zealand	Grants	3.7	0.2	0.1						
(iii) Switzerland	Loans	6.0	7.6	3.1	2.1	2.0	2.1	2.1	1.6	2.2
(iv) Spain	Loans								6.8	
(v) European Economic Community	Grants					3.8				0.3
GRAND TOTAL		4508.8	1131.4	1195.6	902.6	856.3	791.4	834.1	666.2	849.3
(a) Loans		2768.7	674.7	793.2	679.8	660.7	658.9	671.7	649.9	828.6
(b) Grants		336.9	97.1	60.7	65.2	26.1	43.5	50.5	12.0	20.7
(c) PL 480/665 etc. Assistance:										
(i) repayable in rupees		1403.2	359.6	310.9	84.5	107.5	37.7	8.8		
(ii) repayable in convertible currency				30.8	73.1	62.0	51.3	103.1	4.3	

Source: GOI, Economic Survey, 1974-75, pp. 108-9.

Chapter III

EXPORTS PROJECTION

"A projection is a hypothetical calculation designed to indicate what the value of some variable would be at some future time if some specified conditions prevailed."[1] A projection is, therefore, a conditional statement depending upon the specific conditions. A projection is different from a forecast in that the latter is based upon "the best judgement of the forecaster as to what conditions (about exogenous variables) are most likely to prevail; the former is based upon the assumptions about these conditions."[2] A projection that departs radically from the past results is bound to be weak. Unexpected changes in the projected exogenous variables can lead to different dependent results and can cause errors of projections. Even the relationship between exogenous and dependent variables may undergo a change. Projections are, therefore, probable but, none-the-less, useful figures.

In this chapter we have tried to make some projections about the extent of the following commodities on the basis of the (a) expected world demand of various commodities and India's trend of historical share in the world demand. World demand depends upon the rate of growth of income of different countries and Income/Demand relationship; (b) likely growth of domestic production and consumption by taking into consideration various

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1. UNCTAD, Trade Prospects and Capital Needs of the Developing Countries, October 1968.

2. Ibid.

local circumstances; and (c) commercial policies of importing countries.

1. Oil Cakes

Exports of oil cakes were 746,000 tonnes in 1967-68, valued at ₹ 60.5 million. These were 742,000 tonnes in 1971-72 and 1001,000 tonnes in 1972-73 and were valued at ₹ 47.3 million and ₹ 88.0 million, respectively.

World exports of oil cakes have increased by 10 per cent a year and India's share in the past has been 11 per cent of world exports. On these assumptions, the world exports were to be 18.70 million tonnes in 1974-75 and India's share 2.057 million tonnes in the same year. Working on the same assumptions, world exports in 1978-79 will be 27.38 million tonnes and India's share will be 3.01 million tonnes.

The projection, however, shows a radical departure from the presently achieved results. The actual performance has not exceeded 60 per cent of the projection in view of the increasing competition from Philippines, less domestic supply of groundnuts and other oil seeds. The projection has to be toned down. A projection of 1250,000 tonnes (which is roughly 60 per cent of the above estimate for the year 1974-75) and similarly a projection of 1800,000 tonnes for 1978-79 seem more in order. The values for 1974-75 and 1978-79 are ₹ 204.8 million and ₹ 294.9 million, respectively.

2. Tobacco Unmanufactured

Exports of tobacco were 55.4 thousand tonnes in 1967-68. These were 61.0 thousand tonnes in 1971-72 and 98.0 thousand tonnes in 1972-73.

As regards world exports, about 25 per cent of the total production is exported. According to an FAO study[2a], "India's exports of tobacco are expected to increase further by 1975, especially as India's tobacco is offered at low prices, enjoys tariff advantages in the commonwealth countries market and has found a potentially expanding market in the U.S.S.R." The rate of growth has been 6 per cent. At this rate of growth, India's exports will be 83.3 thousand tonnes in 1974-75 and 105.2 thousand tonnes in 1978-79. The exports values for 1974-75 and 1978-79 will be ₹ 69 million and ₹ 88.3 million, respectively.

3. Pepper

In 1967-68, the exports of pepper were 25 thousand tonnes valued at ₹ 17.5 million. India exports more than 75 per cent of black pepper.

There is a great scope for increasing exports of black and white pepper to USSR and other East European countries. The possibilities exist because of "organised package programme for various spice crops ... rapid multiplication of a hybrid variety of pepper called Panniyur-I which is capable of giving four times the normal yield of available varieties ... control of wilt disease in Kerala and popularisation of plant protection measures."[3] In view of this, it is not difficult to have a growth rate of 3.3 per cent per annum as seen for quite some time. At this rate, the production is expected to be 35.9 thousand tonnes in 1974-75 valued at ₹ 38.9 million.

2a. FAO, Agricultural Commodities Projections 1975 and 1985, October 1966.

3. GOI, Fourth Five Year Plan, p. 173.

Working at the same rates, the expected exports for 1978-79 are 44 thousand tonnes and their value will be ₹ 47.7 million.

4. Cashew Kernels

Exports of Cashew Kernels were 51,000 tonnes valued at ₹ 57.5 million in 1967-68. In 1971-72, the exports were 60,000 tonnes valued at ₹ 72.1 million. In 1972-73, the exports were 66,000 tonnes, valued at ₹ 80.9 million.

The nuts from which the kernels are produced are grown in India as well as imported from East Africa. The processing industries are coming up in East Africa. Therefore, there is a need for stepping up home production as well as reducing the faulty collection. There is a need for restraining domestic consumption to increase exports.

The rate of increase of cashew kernels exports has been 6.1 per cent per annum in the past. At this rate, India's exports will be 77.3 thousand tonnes in 1974-75 and 98.0 thousand tonnes in 1978-79. The export values will be ₹ 103.2 million and ₹ 164.9 million for 1974-75 and 1978-79, respectively.

5. Fish and Fish Preparation

Exports of fish and fish preparation in 1967, were 20.2 thousand tonnes valued at ₹ 24.5 million. In 1971-72, the exports were 33 thousand tonnes and in 1972-73, these were 35 thousand tonnes.

The USA is the major buyer of prawns, dry fish and lobsters and frog legs which constitute a major portion of India's export of these items. With the provision of facilities like trawlers,

mechanised boats, landing strips and processing facilities, it appears quite possible to sustain, in exports, a rate of increase of 17.2 per cent per annum, as experienced. At this rate, India's exports will be 61.4 thousand tonnes in 1974-75 and 115.5 thousand tonnes in 1978-79. The values of the exports will be ₹ 135.7 million and ₹ 255.6 million in 1974-75 and 1978-79, respectively.

6. Tea

Exports of tea amounted to 203.4 million kgs valued at ₹ 240.1 million in 1967-68. The exports were 207 million kgs in 1971-72 and 193 million kgs in 1972-73.

According to the UNCTAD survey,[4] "the world trade in tea is expected to rise by 2.2 to 2.6% a year during the period 1960 to 1975." On the basis of 2.2 per cent rise, India's exports will be 247.7 million kgs in 1974-75 and 270.3 million kgs in 1978-79. The export value for 1974-75 will be ₹ 222.4 million and ₹ 242.7 million for 1978-79.

7. Coffee

Exports of coffee were 33.9 million kgs in 1967-68 and export earnings were ₹ 24.3 million. In 1971-72, the exports were 36 million kgs valued at ₹ 26.0 million. In 1972-73, the exports were 51 million kgs valued at ₹ 38.7 million.

The same UNCTAD study expects an increase of 2.1 per cent to 2.3 per cent per annum during 1960-75. Assuming the lower

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4. UNCTAD, Trade Prospects and Capital Needs of Developing Countries, October 1968.

rate of growth of 2.1 per cent a year, the exports are expected to be 39.2 million kgs in 1974-75 and 42.7 million kgs in 1978-79. The export values for these years will be £ 40.1 million for the year 1974-75 and £ 43.6 million for the year 1978-79.

8. Iron Ore

Exports of iron ore amounted to 13.7 million tonnes in 1967-68 and fetched £ 99.9 million.

The Fourth Five Year Plan put the exports at 31 million tonnes for the year 1973-74 and the production required to be met was from Bailadila 14 and 5 (Madhya Pradesh), Barajmda (Orissa and Bihar), Diatari (Orissa), Bellary Hospet (Mysore) and Goa.[5] The actual progress was quite slow in the development of new mines and port facilities for bulk carriers. The export for 1973-74 has been 24 million tonnes. The export for 1974-75 is not going to depart much from this figure for the reasons given. An expected export level of 25 million tonnes has been assumed for 1974-75 and the target of 40 million tonnes, as assumed in some semi-official publications seems in order.[6] The values of the exports, accordingly, are expected to be £ 162.7 million and £ 260.4 million for 1974-75 and 1978-79, respectively.

9 Cotton Fabric

Export of mill made cloth was 450 million metres in 1967-68 and was valued at £ 79.5 million. Exports were 433 million metres

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5. GOI, Fourth Five Year Plan, p. 322.

6. Pant and Mehra, "Prospects of Exports in the Fourth Plan", FTR, January-March 1969 and "Export Studies in India - A Review", Ministry of Foreign Trade, GOI, 1969.

in 1969-70, 443 million metres in 1970-71, 411 million metres in 1971-72, 496 million metres in 1972-73 and 714 million metres in 1973-74.

The prospects of export of mill made cloth do not appear very bright because of increasing domestic production in the importing countries, stiff competition from Japan, Hongkong, China and Pakistan and from synthetic fibres. "World trade in textiles has remained stationery at 80,000 tonnes per year though the consumption and output of cotton textiles have increased at a rate of 3 to 4 per cent a year."[7] It is difficult to think of a major improvement in the export of cotton fabrics. A target of 725 million metres has been assumed for 1974-75, valued at ₹ 229.3 million and a target of 800 million metres has been assumed for 1978-79, valued at ₹ 253.0 million.

10. Jute Manufactures

Export of jute manufactures were 750 thousand tonnes, valued at ₹ 312 million in 1967-68. Exports were 581 thousand tonnes for 1972-73 and 563 thousand tonnes for 1973-74.

The prospects for jute exports are not very bright. According to an FAO report,[8] "the total volume of export availabilities in 1975 would be in the range of 2.24 to 2.65 million tonnes and import requirements in the region of 1.84 to 2.28 million tonnes. About 15 to 20 per cent of jute and jute goods available for export from Asia and Far East might be in

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7. USAID Survey conducted by Economic and Scientific Research Foundation, July 1968.

8. FAO, Agricultural Commodities Projections: 1975 and 1985, October 1966.

excess of world requirements at 1961-63 prices." Under these circumstances, it is difficult to think that the exports will be much beyond 600 thousand tonnes for 1974-75 or for 1978-79. In fact from 1965-66 upto 1973-74, the production has been around this level only. The export value is estimated at $ 284.9 million for both the years 1974-75 and 1978-79.

11. Engineering Goods

The exports of engineering goods were valued at $ 43.5 million in 1967-68. The export of engineering industry has not kept pace with the increasing domestic production and India's share is less than .15 per cent of the world market in exports and this share can increase if the Indian goods are competitive in quality, price, have after-sales services and delivery schedules, etc. The export of railway coaches, wagons, rails, bicycles, electric fans, electric wires, cables, transmission line towers, tubes and pipes, iron and steel castings, aluminium wires have a big potential. In 1973-74, there was a big spurt in the export of engineering goods to Rs. 236.8 crores, as compared to previous years. At the most it will be possible to retain this level of exports for 1974-75 also. For 1978-79, considering the same rate of growth, the estimated exports are $ 352.9 million.

12. Food Grains

India's performance on this front has been marginal. In 1967, the total exports were valued at $ 1.7 million. Great hopes were fixed on the Green Revolution, HYV, greater coverage of area, intensive cultivation, use of fertilisers, seeds and cropping methods. The expectations regarding exports have yet

to be fulfilled in view of the surpluses to be obtained with reference to some commodities.

India has been exporting rice of superior quality for some years and there are chances of exports in this commodity. The projected exports on the basis of the previous performance are ₹ 12.4 million for 1974-75 and ₹ 17.5 million in 1978-79. These seem in order in view of "fighting bacterial leaf blight, tungro and a few other virus diseases ... improving the grain and cooking quality ... water management, fighting deficiency of microneutrient elements of the soil (Zinc causing khaira diseases), introduction of post-harvest technology, threshing and milling, etc."[9] Similarly a projected export value of pulses is ₹ 2.4 million for 1974-75. It is marginal one for pulses. The domestic requirements are bound to be high in this respect and it will not be possible to earn a greater export value than this even in 1978-79.

13. Iron and Steel

Exports of iron and steel were of ₹ 69.3 million in 1967-68. At one time the prospects of increasing exports of iron and steel were considered quite good in view of the natural advantage possessed by India with reference to pig iron and steel. The exports of iron and steel have come down to ₹ 30.2 million in 1973-74 from ₹ 73.2 million in 1969-70 and ₹ 79.1 million in 1970-71. The estimated export figure by GOI has gone on the

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9. GOI, Fourth Five Year Plan, Ibid.

higher side.[10] The projected increase in 1974-75 and 1978-79 has been kept at ₹ 29.4 million which is more or less the figure for 1973-74.

14. Fertilizers

The exports of fertilizers were expected to start in the 4th Plan in view of the most modern and upto-date technology, economies of scale enjoyed by some fertiliser plants. These hopes have been belied in view of the existing low consumption of fertilizer in this country. The projected exports are nil for 1974-75 and also for 1978-79.

15. Raw Cotton

Developed countries differ with reference to imports of raw cotton and wool. The US exports raw cotton while Western Europe imports it. According to the UNCTAD study,[11] "net imports requirements for cotton in Western Europe are expected to increase more slowly than demand but Japan will continue to depend on imports for consumption needs.... Imports from U.S. are expected to stabilise at 1961-63 level." Again, according to the FAO study (already quoted) the rate of growth of cotton and wool will be as follows:

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10. QOI (Ministry of Foreign Trade), "Export Studies in India - A Review", 1969.

11. UNCTAD, op. cit.

Table 1

Annual Compound Rate of Growth 1960-75

(in percentages)

Commodities	Destination							
	Developed Market Economies		Socialist Countries		Developing Countries		Total	
	Low	High	Low	High	Low	High	Low	High
Cotton	0.6	0.9	4.2	5.4	2.8	4.2	1.7	2.5
Wool	1.8	2.1	.1	.1	2.7	4.3	1.6	1.9

Source: UNCTAD, Trade Prospects and Capital Needs of Developing Countries, October 1968 (Partial Reproduction)

Assuming the lower rate of growth of 1.7 per cent per annum for India, the exports are expected to be 50.2 thousand tonnes in 1974-75 valued at £ 34.8 million. On the same assumptions, the exports are likely to be 53.7 thousand tonnes in 1978-79 and the expected export value is £ 37.2 million. In view of the higher production, "cultivation on .5 million hectares in irrigated and assured rainfall areas ... plant protection through aerial and ground operations on 800,000 hectares ... folier spray of urea over an annual area of 22,500 hectares ... multiplication of production seeds ... research on varieties resistent to diseases (blackarm) and pests (jassids, bolworms)"[12], the export projection appears in order.

16. Raw Wool

Some mention of the rate of growth in the raw wool has already been made in the columns of raw cotton above. It may be

12. GOI, Fourth Five Year Plan, pp. 163-64.

added that developed markets, excluding Oceania, are expected to import more wool than the demand. According to FAO estimates, "production of wool in North America and Western Europe in 1975 may be maintained at 1961-63 level or may decline slightly."[13]

With a rate of exports of 1.9 per cent (which is more appropriate in view of the actual exports) the projected exports are expected to be 10.5 thousand tonnes in 1974-75 and are expected to fetch £ 8.5 million. On the same assumptions, the exports are estimated to increase to 11.3 thousand tonnes and fetch £ 9.2 million in 1978-79.

17. Manganese Ore

The export of the manganese ore for the year 1967-68 was 1,074 thousand tonnes and it was valued at £ 14.8 million. The UNCTAD study (same) puts the rate of growth of exports of manganese ore at 4.2 per cent. At this rate, the exports are expected to be 1,401 thousand tonnes in 1974-75. This is at variance with the actual production and exports which have been declining. The exports have declined from 1,636 thousand tonnes in 1970-71 to 1,047 thousand tonnes in 1971-72 and to 832 thousand tonnes in 1972-73 and 758 thousand tonnes in 1973-74. In view of this the estimated figure of 1,401 thousand tonnes seems unlikely. At the most, the figure of 800 thousand tonnes which is near 1973-74 figure appears more likely for the year 1974-75 and it is expected to fetch £ 11.2 million. A growth rate of 4.2 per cent on 800 thousand tonnes gives a target of 943.4 thousand tonnes valued at £ 13.2 million in 1978-79.

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13. FAO, Agricultural Commodities Projections: 1975 and 1985, October 1966.

18. Mica

Export of mica was 22.9 million kgs in 1967-68 and it fetched £ 20.0 million in that year. Exports were 23 thousand tonnes in 1971-72 and 27 thousand tonnes in 1972-73. The same UNCTAD study projects a rate of growth of 4.3 per cent (lower) for non fuel minerals and metals. The chances of mica catching up this rate are quite bright. According to this assumption, the exports are likely to be 30.8 thousand tonnes and 36.4 thousand tonnes in 1974-75 and 1978-79, respectively and are expected to fetch £ 18.1 million and £ 21.4 million, respectively for these years.

Table 2

Estimates for 1974-75 and 1978-79

(In $ million)

Sr. No.	Commodity	Unit	1974-75 Quantity	1974-75 Value	1978-79 Quantity	1978-79 Value
1	2	3	4	5	6	7
1.	Agriculture and allied Products including Plantation Crops	Value	-	247.2	-	1284.8
2.	Oil Cakes	(Thou.Tonnes)	1250.0	204.8	1800	294.9
3.	Tobacco	"	83.3	69.9	105.2	88.3
4.	Pepper	"	35.9	38.9	44.0	47.7
5.	Cashew Kernels	"	77.3	103.2	98.0	164.9
6.	Raw Wool	"	10.5	8.5	11.3	9.2
7.	Raw Cotton	"	50.2	34.8	53.7	37.2
8.	Fish and Fish Preparation	"	61.4	135.7	115.5	255.6
9.	Tea	(Mill.kgs)	247.7	222.4	270.3	242.7
10.	Coffee	"	39.2	40.1	42.7	43.6
11.	Food Grains	(Thou.Tonnes)				
	Rice	"	-	12.4	-	17.5
	Pulses	"	-	2.4	-	2.4
12.	Others*			75.8		80.8
13.	Minerals			192.0		295.0
14.	Iron Ore	(Mill.Tonnes)	25	162.7	40	260.4
15.	Manganese	(Thou.Tonnes)	800	11.2	943.4	13.2
16.	Mica	(Mill. kgs)	30.8	18.1	36.4	21.4
17.	Cotton Jute Manufactures		-	514.2	-	537.9
18.	Cotton Fabrics	(Mill. Tonnes)	725	229.3	800	252.0
19.	Jute	(Thou.Tonnes)	600	284.9	600	284.9

Table 2 (contd.)

1	2	3	4	5	6	7
20.	All Other Manufacturers	Value	-	642.6	=	900.1
21.	Engineering Goods	Value	-	236.8	-	352.9
22.	Iron and Steel		-	29.4	-	29.4
23.	Fertilisers		-	-	-	-
24.	Other Manufacturers**			376.4	-	517.8
25.	Other Exports ***			231.2		278.8

* A growth rate of 1.6 per cent per annum has been assumed according to UNCTAD, Trade Prospects and Capital Needs of Developing Countries, p. 58.

** The above UNCTAD study assumes a rate of growth of 8.3 - 9.3 per cent. The lower rate of 8.3 per cent been assumed.

*** A growth rate of 4.7 per cent per annum, as recorded by these commodities, has been assumed.

Figure 1 indicates the totals from 2 - 12

Figure 13 indicates the totals from 14 - 16

Figure 17 indicates the totals from 18 - 19

Figure 20 indicates the totals from 21 - 24

Table 3

Estimates of India's Exports by Broader Groups

India's Exports 1974-75, 1978-79

(Value in Million $)

S.No.	Item	1974-75	1978-79
1.	Agriculture and Allied Products including Plantation Crops	947.9	1284.8
2.	Minerals	192.0	295.0
3.	Cotton Jute Manufactures	514.2	537.9
4.	All Other Manufactures	642.6	900.1
5.	Unspecified Exports	231.9	278.8
	Total Exports	2528.6	3296.6

Table 4

Compound Rate of Growth of Exports

	1974-75	1978-79
Compound Rate of Growth with reference to 1967-68	6.8 per cent	6.8 per cent

Chapter IV

THE REPAYMENT BURDENS

The methodology of debt servicing profile, worked out in this chapter, is like this. First of all the burden of existing debt, as on March 31, 1968 has been calculated. (There is nothing sanctimonius about the date except that this date was used at the time of the writing of the first draft and can be used again without any disadvantage). From the amounts of the loans, maturity of loans, rate of interest, grace period of different loans, we can arrive at the amounts of interest and amortisations over various years. Columns 2 and 3 in the Table 3 indicate this. To these have been added the additional burdens of the amount borrowed in 1968-69. The amount borrowed is available in Government of India, External Assistance, 1969 and also Government of India, Basic Statistics relating to Indian Economy, Statistics and Survey Division 1968-69. There is a slight variation of the amounts in these two publications. However, for the calculation of interest and amortisation it is not significant. The terms of assistance (grace periods, weighted average rate of interest, weighted years of maturity) have been calculated from Table 6 and the amounts of interest and amortisation for various years have been found out. The amounts borrowed in the Fourth Plan are available. The weighted average rate of interest, grace years and years of maturity have been calculated for years 1967-71. The choice of 2.5 per cent interest, 28 years of maturity and 6 years of grace has been made for the reasons at the end of the Table 4.

The additions of amounts in columns 2 to 7 for years 1974-75 to 1978-79 in Table 3 give the burdens due to interest and amortisation during the Fifth Plan. When we add the net borrowings to these we get gross borrowings. With the assumptions regarding weighted rate of interest, grace years, years of maturity, we can find out the time profile of interest and amortisation of burdens of the debt during the Fifth Plan.

The sum total from columns 2 to 9 in Table 3 can be used for calculating the debt servicing ratio when the exports are given.

The Fourth Five Year Plan visualises gross external aid of Rs. 4,130 crores and a net external aid of Rs. 1,850 crores. Again it states the objective of reducing the net foreign aid to "half the current level by the end of the Fourth Plan and to eliminate altogether as speedily as possible thereafter." The picture of debt burden which emerges is as follows:

1. Gross aid in the Fourth FYP

i)	PL 480	=	Rs.380 crores
ii)	Project and Non-Project	=	Rs.3750 crores
	Total	=	Rs.4130 crores

2. Net Aid in the Fourth FYP = Rs.1850 crores

3. Net Aid in the Fifth FYP (one half of 2) = Rs. 925 crores

4. Repayments in the Fifth FYP on account of debts incurred upto the Fourth FYP (total of the principal + interest payments of debts as on March 31, 1968 plus of debts during 1968-69 plus of fresh borrowings in the Fourth Plan) (Adding row-wise column 2 to 7 for years 1974-75 to 1978-79 in Table 3) = Rs.3137 crores

5. Gross borrowings in the Fifth FYP = Rs. 925 crores + Rs. 3137 crores = Rs. 4062 crores

6. Growth Rate of Exports = Rs. 6.8 per cent (as per previous chapter)

7. Debt Servicing Ratio:

Table 1

Year	Repayments of debt (Rs. crores) (See Table 3 Below)	Exports (Rs.crores) (See previous chapter)	Debt Servicing ratio	Debt Servicing ratio rounded off to the next figure
1969-70	536	1549.35	34.6	35
1970-71	536	1664.7	32.4	32
1971-72	540	1767.23	30.6	31
1972-73	535	1887.40	28.4	28
1973-74	524	2015.74	25.9	26
1974-75	517	2152.81	24.0	24
1975-76	778	2299.2	33.8	34
1976-77	756	2455.6	31.1	31
1977-78	749	2622.5	28.6	29
1978-79	736	2800.85	26.3	26

The debt service ratio measures the vulnerability to default and hence it measures the severity of the debt burden. A study by the IMF[1] (David Finch, Investment Service of Underdeveloped Countries) on the debt service capacity concludes like this:

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1. Avramovic and others, Debt Servicing of Underdeveloped Countries (1956-58), Baltimore, the John Hopkins Press, 1958.

> "History provides little guide for determining the maximum (debt service) ratio which countries can sustain. Argentina defaulted on public debt obligations in 1933 with a ratio of 36% ... and restricted transfers after 1947 with a ratio of only 10% in 1945. Australia managed to avoid defaults with an investment service ratio of 32 to 37 per cent in 1931-33. Latin American countries defaulted when their debt service ratios were much smaller than the investment service exchange ratios for Australia and Canada."

In countries, where other variables in the liquidity position are conducive, a higher debt service ratio is not embarrassing. In countries where other variables are not conducive a debt service ratio ranging between 24 per cent - 35 per cent can be a worrying factor . In case of the Indian repayment problem, the prospects from exports (leaving a year or so) have not been encouraging. The prospects (direct) from private capital inflows are negative. The chances of inflation-induced imports have been increasing. A single item of crude import has meant an increase of Rs. 900 crores in the single year of 1973-74. The imports due to fertilizers and foodgrains are posing other severe problems. The compressibility of imports has not been worked out. As far as the reserves are concerned they have touched the rock bottom. The cost of compensatory finance - short term borrowing in the private foreign markets - is prohibitive considering that it is difficult for this country to repay even soft loans. There has been an increasing tendency for debt relief and general purpose loans. The finance for repayments and even for the outflow of foreign private investment has come mostly from further aid. The repayments upto 1960-61 have been made out of India's currency reserves.

The severity of repayments is also made more clear even when we find out the modified version of the debt service ratio. The balance of payment on invisibles on current account are available for the years 1969-70, 1970-71, 1971-72, the years for which the ordinary debt service ratio has been calculated. Since this balance is negative the ratio works out still higher.

Year	Repayments	Invisible Items	Exports	Modified debt Service ratio
1969-70	536	- 149	1549	38.3 (38)
1970-71	536	- 169	1655	36.8 (39)
1971-72	540	- 137	1767	33.1 (33)

The modified debt service ratio ranging from 33 per cent to 39 per cent in itself is sufficiently high, even if we take into consideration the other variables.

Another way of judging the severity of the repayments is by the ratio of rate of interest and the rate of growth of the economy. If the rate of interest is higher than the rate of growth of the national income the repayments may snowball into a debt default. At least for some years for this country, the rate of interest has been higher than the rate of growth, for example, the rate of growth of national income at consent prices was 1.7 per cent and -1.7 per cent for years 1971-72 and 1972-73, respectively but the interest rate was positive. Similarly the weighted average rate of interest for the Second Plan and during 1961-62 was 4.3 per cent and 3.2 per cent, respectively but the rate of growth was less. This again shows that the burden imposed by repayments has been quite severe.

The repayments are more than one per cent of gross national income for some years which again shows that India is sending out resources which even the advanced countries have yet not sent out in the form of aid.

The terms of assistance have also very much to do with the oppressive nature of the repayments. If these terms are harsh the repayment becomes difficult. In India, the loans are made by donors in their own currency but the repayment is, mostly, not accepted in the Indian currency. The ratio of the repayment in the Indian currency to the foreign currency declined from 14 per cent upto the end of the Second Plan to 8.1 per cent in the Third Plan, to 1.4 per cent in 1966-67, to .5 per cent in 1967-68 and to .1 per cent in 1969-70. This imposes a severe limitation on India's repayment capacity.

The aid tying to source/project also imposes severe burdens on the country. All these have been pointed out, in some detail, in the chapter on Increasing Aid Efficiency. The higher percentage of tied aid to total aid is again an indicator of the severity of the debt and has adverse consequences for the repayment problem.

Table 2

Period	Share of tied credits in the total percentage	Share of untied credits in the total assistance percentage
Upto 1st Plan	83.3	16.7
During the 2nd Plan	77.1	22.9
During the Third Plan	86.7	13.3
1966-67	83.8	16.2
1967-68	78.8	21.2
1968-69	82.7	17.3
1969-70	77.1	22.9
1970-71	79.7	20.3
1971-72	78.7	21.3
1972-73	58.3	41.7
1973-74	46.9	53.1
Total	78.9	21.1

Source: GOI, Economic Survey 1974-75, p. 110 and GOI, Estimates Committee for the Utilisation of Foreign Aid 1968-69.

Again if adjustment is made for the single item of increase of imports of crude then out of the expected exports of Rs. 2,016 crores, for the year 1974-75 that which will be left to finance the import bill will be very small (Exports 2,016 - Additional oil imports Rs. 900 crores - Debt Servicing Rs. 536 crores - Invisibles Rs. 100 crores = Rs. 480 crores). Similarly for the next year this amount will be hardly Rs. 375 crores (Exports 2,153 crores - Rs. 900 crores - Rs. 778 crores - Rs. 100 crores = 375 crores). This again shows that the situation is quite oppressive.

Table 3

Burden of Repayments

Burden of Debt Servicing (Amount in crores)

Year	Of outstanding debt as on 31.3.68*		Of Borrowing ** during 1968-69.		Of Borrowing in Fourth FYP ***		Of Borrowing in the Fifth FYP****		Total
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	
1	2	3	4	5	6	7	8	9	10
1969-70	267	145	-	20.7	-	103	-	-	535.7
1970-71	271	141	-	20.7	-	103	-	-	535.7
1971-72	285	131	-	20.7	-	103	-	-	539.7
1972-73	290	121	-	20.7	-	103	-	-	534.7
1973-74	291	109	-	20.7	-	103	-	-	523.7
1974-75	293	100	-	20.7	-	103	-	-	516.7
1975-76	291	90	27.8	20.0	148	99	-	102	777.8
1976-77	290	83	27.8	19.3	148	95	-	102	765.1
1977-78	288	74	27.8	18.6	148	91	-	102	749.4
1978-79	288	65	27.8	17.9	148	87	-	102	735.7

* The reasons for this part have been explained in the methodology in the beginning.

** The borrowing according to GOI, External Assistance 1969 shows that it is Rs. 778.6 crores while according to GOI, Basic Statistics Relating to Indian Economy, 1968-69 it is Rs. 748.24 crores for 1968-69. In the calculations above, the figure of Rs. 778.6 crores has been taken. The rate of interest is 2.66 per cent being the weighted average rate of interest for the amounts borrowed in 1968-69. The grace years are 6 because the weighted average is 5.78 years and the years of maturity after the grace years are 28, again being the weighted average.

*** The amount is Rs. 4,130 crores, being the gross borrowing during the Fourth FYP. The assumption of the rate of interest is 2.5 per cent, grace years 6 and years of maturity 28. The reasons for these have been given below in the assumptions for the terms of assistance.

**** The net borrowing in the Fifth FYP is Rs. 925 crores. The burden of interest and principal of previous debts is Rs. 3,137 crores. The rate of interest assumed is 2.5 per cent, grace years 6 and years of maturity 28. The reasons for these have been given below in the assumptions of the terms of assistance.

Note:

1. Calculations of interest for columns 5, 7 and 9 in the Table 3 above have been made on the assumptions that the sums have been borrowed in the beginning. In actual practice, there will be some departure. The burdens of interest and principal payments will get slightly redistributed but it will not make a substantial difference in our calculations.

2. The instalments of principal payment in columns 4, 6 and 8 have been calculated by dividing the total amount of repayments by the weighted average repayment period minus the weighted grace years.

3. If an instalment of principal is paid the interest on that is not calculated. For example, when in Table 3, column 4, an instalment of Rs. 27.8 crores in 1975-76 is paid, the interest on it has not been calculated and therefore, the interest on the remaining sum (Rs. 778.6 crores - Rs. 27.8 crores) and at 2.66 per cent comes to Rs. 20.0 crores.

4. Actually some repayments of the principal borrowed in the beginning of the Fifth FYP may fall in the Fifth FYP. It may thus raise the total charges in column 10 and the debt servicing ratio also during the Fifth Plan to a figure higher than 35 per cent.

Weighted Average Terms of Loans during 1967-68, 1968-69, 1969-70 and 1970-71

From the relevant data from the External Assistance, Government of India publication for the above years given in the Appendix, we can calculate the weighted average rate of interest, years of maturity and grace years.

The results are as follows:

Table 4

Year	Weighted Average rate of interest. Percentage per annum	Weighted Average grace period	Weighted Average years of repayment after grace years
1967-68	2.3	7.9 years	28
1968-69	2.66	5.78 years	28
1969-70	2.0	4.96 years	28
1970-71	2.15	8.51 years	28 (approx.)

The information regarding the terms of assistance after years 1970-71 is not available, therefore, assumptions regarding these for the Fourth FYP and Fifth FYP have been made as under.

Assumptions regarding the Terms of Assistance in Fourth and Fifth FYP

The assumed rate of interest is 2.5 per cent, grace years 6 and period of maturity 28 years.

The weighted average rates of interest have been as follows:

During Second Plan	4.3%
During 1961-62	3.2%
During 1963-64	2.6%
During 1964-65	2.7%
During 1965-66	3.2%
During 1966-67	2.4%
and for	
During 1967-68	2.3%
During 1968-69	2.66%
During 1969-70	2.0%
During 1970-71	2.15%

The weighted average rates of interest above the line have been calculated by GOI, Ministry of Finance, Review of Foreign Aid, p. 10.

The weighted rate of interest is unlikely to have a further dip. The distribution between US grants and loans has become harder. World Bank terms are quite hard since the funds are raised in the international capital markets. IDA loans are also unlikely to have lower interest rates. Moreover outright interest free loans will also be less acceptable to India. The assumed years of grace (6) and maturity (28) after the grace years are sufficiently long and have, therefore, less chances of getting still longer.

APPENDIX

Relevant Data from GOI, External Assistance 1967-68, 1968-69, 1969-70 and 1970-71 from which the terms of assistance have been calculated.

Table 5

Statement showing Loan Agreements signed during 1967-68 excluding debt relief in the form of grants

Sr. No.	Name & Source of Credit	Date	Amount in Mill.Rs.	Maturity including grace years	Grace period years	Interest percentage per annum	Remark
1	2	3	4	5	6	7	8
1.	Austria						
	Capital Equipment, components etc.	15.12.67	19.2	20	7	5.5	
	Food Loan	15.12.67	7.5	25	7	3	
	Suppliers' Credit		7.5	10	-	5.5	
2.	Belgium						
	Government Credits	24.4.67	9.0	20	5	3	
		22.12.67	18.75	20	5	3	
3.	U.K.						
	Non project General and balance of payment assistance	-	558.0	25	-	-	
4.	Canada						
	Sharavathy Aluminium Project	11.8.67	38.2	12.5	2.5	6	
	Development Loans	Various	483.3	50	10		
5.	Federal Republic of Germany						
	Various	Different	89.3	15	-	3	
			452.9	25	-	3	
6.	Denmark						
	Food Loan	-	30.0	15	-	-	
7.	Japan						
	Non project, Machinery Raw Material	5.9.67	291.7	15	5	5.5	Notion
	Food	14.7.67	52.5	15	5	5.75	

Table 5 (contd.)

1	2	3	4	5	6	7	8
8.	Netherlands						
	Capital Goods, Raw Material and Components	21.11.67	53.9	25	7	3	
	Suppliers' Credit	not given	29.0	10	-	6	
9.	USA						
	Under P.L. 480	8.3.68	658.12	40	10	2.4**	
		8.3.68	422.21	40	10	2.4**	
		8.3.68	2113.4	40	10	2.4**	
	In Convertible Local Currency	24.6.67	181.5	40	10	2.1**	
		12.9.67	142.5	40	10	2.1**	
		23.12.67	351.8	40	10	2.4	
		2.6.67	67.5	40	10	2.1**	
		10.5.67	988.0	40	10	2.1	
		21.10.67	375.0	40	10	2.1	
10.	World Bank						
	Development of Private Industries	19.9.67	187.5	18	-	5.5	

Source: GOI , External Assistance (Partial Reproduction)

Table 6

Statement Showing Loan Agreements Signed during 1968-69 Excluding Debt Relief in the form of Grants

Sr. No.	Name and Source of Credit	Date	Amount in Million Rupees	Maturity Including grace years	Grace period years	Interest percentage per annum	Remarks
1	2	3	4	5	6	7	8
1.	Austria						
	Debt Relief	24.7.68	6.6	25	7	3	
2.	Belgium						
	Suppliers Credit	not given	75.0	10	-	6.25*	*Notional
	Government Credit	18.12.68	10.55	25	7	3	
3.	Britain						
	Various Purposes	Different	648.0	25	-	-	
4.	Canada						
	Rajasthan Atomic Power	30.4.68	45.1	20	6	6	
	Development Loans	Different	208.2	50	10	-	
5.	Denmark						
	Capital Equipment	24.4.68	40.0	25	7	-	
6.	Federal Republic of Germany						
	Various	Different	512.4	25	-	3	
7.	France						
	Suppliers Credit	5.4.68	101.25	20	2	3.5	
			101.25	10	-	7.2	
	Various	3.1.69	84.38	20	2	3.5	
		-	84.38	10	-	7.2	
		9.10.68	33.75	9	3	3.5	
8.	Italy						
	Suppliers Credit	not given	120.0	10	1	6	
9.	Japan						
	Plants, Machinery, Raw Material etc.	14.2.69	211.3	18	5	5.25	
	Debt Rescheduling	25.7.68	101.8	9	3	4	
		5.2.69	24.4	9	3	4	

Table 6 (contd.)

1	2	3	4	5	6	7	8
10.	Netherlands						
	General Purpose	16.7.68	68.4	25	7	3	
		-	14.5	10	-	6	
11.	Norway	16.9.68	42.0	20	**	2	**less than 5 months
12.	Sweden						
	Capital goods	28.6.68	50.75	25	10	2	
		28.6.68	58.0	25	10	3	
13.	USA						
	PL 480	23.12.68	537.0	40	10	2.75*	
	Fertilizer, Family Planning and Non-Project	Different	3332.3	40	10	2.75*	
	Purchase of Boeing and Jumbo Jets	1.5.68	187.5	10.5	-	6	
	Capital goods spares	4.10.68	150.0	12	-	6	
14.	IDA						
	Industrial Imports	22.1.69	937.5	50	-	3/4	

Source: GOI, External Assistance (Partial Reproduction)

Table 7

Statement Showing Loan Agreements signed during 1969-70 excluding debt Relief in the form of Grants

Sr. No.	Name and Source of Credit	Date	Amount in Million Rupees	Maturity Including grace years	Grace period years	Interest percentage per annum	Remarks
1	2	3	4	5	6	7	8
1.	Austria						
	Debt Relief	16.10.69	8.1	25	7	3	
2.	Belgium						
	For import of commodities and maintenance imports	18.2.69	14.25	30*	10	2	(*Cash relief of Rs. 8.25 million has been excluded)
3.	Britain						
	Various purposes	Different	981.0	25	-	-	
4.	Canada						
	Commodities, Fertilizers, Telecommunication	"	487.9	50	10	5	
5.	Federal Republic of Germany						
	Various	Different	264.3	30	-	2.5	
	Debt Relief		127.0	10	-	3	
6.	Japan						
	Debt Rescheduling	4.8.69	147.0	9	3	4	
	Capital goods	3.3.70	190.8	18	5	5.25	
7.	Netherlands						
	Capital goods, Raw Materials etc.	10.1.70	82.9	25	7	2.5	
8.	USA						
	Capital goods for Private Sector	16.11.69	150.0	40	10	2.75**	(**notional
	Wheat Loan	10.3.69	479.03	15	10	2.33	
		14.1.70	144.46	15@	10	2.33	(@it is 15 years and one month)
		25.4.69	267.0	40	10	2.75**	
		13.10.69	861.8	40	10	2.75	
		16.11.69	150.0	40	10	2.75	
		8.9.70	15.0	10	-	6.1	
9.	World Bank						
	IDA -Railways, telecommunication etc.		881.2	50	-	0.75	

Source: GOI, External Assistance 1968-70 (Partial Reproduction)

Table 8

Statement showing loan Agreements signed during 1970-71 excluding debt relief in form of grants

Sr. No.	Name and Source of Credit	Amount in Million Rupees	Maturity including grace years	Grace years	Interest percentage per annum	Remarks
1.	Austria	11.0	25	7	3	
2.	Belgium	101.3(75	12	0	6.35(average)	
		(26.3	30	10	2	
3.	Britain	792.0	25	7	Nil	
4.	Canada	254.2	50	10	Nil	
5.	France	419.3(74.8	9	3	3.5	
		(344.3	30	5.5	5.5	
6.	Federal Republic of Germany	517 (156	10	3.0	3	
		(361	30	8.0	2.5	
7.	Italy	60.0	10	1	6	
8.	Netherlands	82.9	30	7	2.50	
9.	Sweden	181.2	50	10	.25	
10.	USA Exin. Loans	221.0	14 (average)	3 (average)	6 (average)	
	" AID Loans	2322.6	40	10	2.75 (average)	
11.	IBRD	80.0	30	10	2.75	
12.	IDA	1259.2	50	10	.75	

Source: GOI, External Assistance 1970-71 (Partial Reproduction)

Chapter V

AID TERMINATION

Aid termination has been used here in a limited sense -- termination of aid at the self-sustained level. An LDC may also think of getting aid upto the point of closing the gap between it and an advanced country. The latter situation will arise much later and has neither been visualised by our planners nor analysed here.

Various stages in the debt cycle coincide with a deficit on external account (imports exceeding exports), a balance on external account (imports equalling exports) and a surplus on external account (exports exceeding imports). Other corresponding stages are investment exceeding savings, investment equalling savings and savings exceeding investment. It is the second stage with which we shall concern ourselves here.

As regards imports, the Planning Commission has projected the demand for different sectors and added these up and come to the figure Rs. 4,200 crores[1] for 1985-86. The task of estimating import demand on the lines of Planning Commission is too stupendous to be undertaken by a study like this. Simpler methods of projecting imports by fitting a linear trend of $Y = a + bx$ have been adopted by some economists[2] but these do not impress because of their unsoundness. For example, the projection of foodgrains on the basis of the linear trend will show huge imports while in

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1. GOI, Draft Fifth Five Year Plan, p. 4.

2. Bipin Bihari, Imports in a Developing Economy, Vora & Company, Bombay.

reality these were nil for a couple of years. For the purpose of analysis, we will take the Planning Commission figure of Rs. 4,200 crores, for the year 1985-86.

The point of aid termination in the Plan documents has been varying, rather receding. Thus the goal of elimination of dependence on concessional foreign aid, according to the Third Plan was to be obtained within a period of 10 to 12 years. The years work out to be 1976 to 1978.

According to the Fourth Plan, foreign aid net of debt servicing (including both interest and amortisation payments) was to be reduced, by the end of the Fourth Plan, to half the level and speedily eliminated thereafter. By 1980 or so, even the interest component of debt servicing was to be met from our own foreign exchange savings, thus reducing the gross aid to the level of amortisation payments only. The actual point, according to the Fourth Plan, is, therefore, 1980 or so when the balance of payments are equal and after that the repayments start. The time is enhanced by two years (at least).

The approach to the Fifth Plan talks of reducing net aid to zero in the terminal year 1978-79. It does not give any indication of the point of aid termination.

The Draft Plan document aims at bringing about a sufficient improvement in the balance of payments so as to meet by 1978-79, the maximum amount of our foreign exchange requirements, other than debt service charges, from our own resources. This is no indication of the point of aid termination. The draft plan document, however, goes further and states that it has been visualised that by 1985-86 we would be in a position to meet

the maximum amount of our foreign exchange requirements, including debt service charges, from our own reserves thus obviating the need for any significant inflow of concessional aid. This time the year turns out to be 1985-86.

Even if we accept the year 1985-86, we find it will be difficult to have aid termination as there is still a gap of about Rs. 50 crores in this year. (The exports worked out on our assumptions are Rs. 4,156 crores). This means that the point of aid termination has to be postponed still further. The figure 4,200 crores does not take into account the additional oil imports, which if added will increase the gap by another 1,000 crores rupees.

It, therefore, appears necessary to step up growth and more particularly tilt the growth pattern in favour of import substitution/export promotion. The lines which deserve attention are:

(a) Development of key and basic industries -- iron and steel, non-ferrous metals, fertilizers, basic chemicals, machine building, cement, electric power, coal, ore mining, petroleum extraction and petroleum substitution;

(b) agriculture and allied activities;

(c) export industries; and

(d) articles of mass consumption.

Various lines of export promotion/import substitution have been suggested in the chapters that follow.

Since the internal and external gaps are equal, the aid termination requires, in financial terms, that investment be financed out of domestic savings. This means taking a large number of measures to increase production. It is not possible

to generate a larger level of savings out of a low, stagnant level of GNP. Increasing the GNP and a will to exploit surpluses where these exist -- in agricultural taxation, taxes on licences, taxation on speculation in urban property, netting unaccounted money, etc. -- are necessary.

The difficulty in achieving aid termination/self-sufficiency is not the prevailing degree of inequality of incomes[3] which makes the import contents of the consumption of the affluent more. At least it is not wholly so. In all fairness, the higher import contents of consumption of the affluent must be set off with the contribution of the affluent to production, productivity, exports promotion/import substitution, for finding out the proper effect on self-reliance. Secondly, if the argument were correct, then countries with inegalitarian pattern would not have achieved aid termination. To raise ideological contentions, where these are inadequate or incorrect, is fraught with other difficulties too. The real task, here, is restructuring consumption, production, rather than ideology.

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3. K.S. Gill, "Self Reliance", Northern Economist, Vol. 1, No. 1, January-March 1974.

PART II

Chapter VI

SAVING INVESTMENT TRENDS

As stated earlier in the introduction, an increasing rate of savings over that of investment is one of the sine qua non of the repayment problem. A survey and an analysis of saving investment trends in India (Table 1 below) reveals an alarming position. Both saving and investment which more or less increased from 1961-62 to 1965-66 have tended to decline but for some increase in years 1972-73 and 1973-74. The tendency to increase does not seem to continue for the later period.

Table 1

Rate of Saving and Investment

(Percentage of NDP)

Year	Investment	Domestic Savings	Foreign Savings
1960-61	12.0	8.9	3.1
1961-62	10.8	8.6	2.2
1962-63	12.0	9.6	2.4
1963-64	12.7	10.7	2.0
1964-65	12.0	9.8	2.2
1965-66	13.4	11.1	2.3
1966-67	12.2	9.0	3.2
1967-68	10.6	7.9	2.7
1968-69	9.5	8.4	1.1
1969-70	9.2	8.4	.8
1970-71	9.6	8.3	1.3
1971-72	9.6	8.2	1.4
1972-73	10.5	9.5	1.0
1973-74	11.1	10.2	.9

Source: GOI, The Fourth Plan Mid Term Appraisal, Vol. I, p. 36.

The future strategy of the planners is as follows:

The total investment has been projected to grow from Rs. 6,922 crores in 1973 to Rs. 11,130 crores in 1978-79. The domestic savings have been projected to grow from Rs. 6,136 crores in 1973-74 to Rs. 10,708 crores in 1978-79. In terms of GNP, the rate of saving has been estimated to increase from 12.2 per cent in 1973-74 to 15.7 per cent in 1978-79.

The break up of the increase in savings is given below:

Table 2

Domestic Saving by Sector of Origin 1973-74 and 1978-79

(Rupees crores)

Sector/Sub Sector	1973-74	1978-79	Increase (3-2)
1. Public Sector	1,393	4,096	2,703
i) Government	759	2,460	1,701
ii) Public Autonomous Undertakings	634	1,636	1,002
2. Private Sector	4,743	6,612	1,859
i) Corporate	669	963	294
ii) Cooperative	50	68	18
iii) Household	4,024	5,581	1,557
3. Total	6,136	10,706	4,572

Source: GOI, Draft Fifth Five Year Plan (1974-79), Vol. I, Chapter 4.

Obviously the accent is on public saving which has been projected to rise from 2.8 per cent of GNP in 1973-74 to 6 per cent of GNP in 1978-79, a rise by 3.2 per cent points. Private saving shows a modest rise from 9.4 per cent of GNP in 1973-74 to 9.7 per cent of GNP in 1978-79 -- an improvement of only .3 percentage point.

In order to call forth a rise in public saving, the Government disposable income is assumed to increase as follows:

Table 3

(Rs. crores)

	1973-74	1978-79
1. Factor Incomes	568	897
2. Direct Taxes	1,571	2,600
3. Indirect Taxes	5,971	9,405
4. Miscellaneous Current Receipts	198	267

The Government factor income, according to planners, will increase because there has been a large increase in Government assets but the Government factor income is small compared to large volume of its assets.

The yield from additional indirect tax revenue in the Fifth Plan has been projected taking into account the various possibilities for the legitimate use of the instrument; and in the opinion of the Commission its scope has not been exhausted. Again in the opinion of the Commission, "the economies in cost, by neutralising any price raising effect of indirect taxes enlarges the scope for the latters use as instrument for Government income".[1] The Commission calls for intensification of efforts to reap the cost economies due to accelerated implementation of development projects and programmes, proper maintenance of plant and equipment,

1. GOI, Draft Fifth Five Year Plan (1974-79), Vol. I, Chapter 4.

fuller utilization of capacity, economies in the use of raw materials, fuel, power, transport and other current inputs, improvements in labour productivity and management, avoidance of uneconomic scale, adoption of cost saving technology and innovations, appropriate location of projects; judicious specialisation and intimate coordination between different economic regions and reduction in producers' and distributors' profit margins to a reasonable level.

That the indirect taxes, by themselves are thus estimated to raise the general price level by only three per cent over the entire Fifth Plan period, if the factor cost inflation is avoided as a consequence of rise in prices due to a rise in indirect taxes.

That the public corporate saving is projected to grow from Rs. 634 crores to Rs. 1,636 crores. That the estimate for 1978-79 includes an amount of Rs. 410 crores mainly from price adjustments to be undertaken by public autonomous undertakings.

That the private corporate saving is estimated to grow from Rs. 669 crores to Rs. 963 crores during the same period. The depreciation has been estimated to account for about 70 per cent of private corporate saving. The sector has a high marginal rate of saving, i.e. 40 per cent of after tax profits. The actual position is as given below:

Table 4

Private Corporate Saving 1973-74 and 1978-79

(Rs. crores)

Depreciation Provision	1973-74 1	1978-79 2	Increase (2-1) 3
1. Non Financial Companies	662	953	291
(i) Depreciation Provision	474	685	211
(ii) Retained Profits	188	268	80
2. Financial Companies	7	10	3
(i) Depreciation Provision	1	1	0
(ii) Retained Profits	6	9	3
3. Total Private Corporate Sector	669	963	294
(i) Depreciation Provision	475	686	211
(ii) Retained Profits	194	277	83

Source: Ibid.

That the Household saving is expected to grow from Rs. 4,024 crores to Rs. 5,581 crores -- an increase of Rs. 1,557 crores over this period. The improvement is expected to be achieved even though household disposable income would decline from 83.9 per cent of GNP in 1973-74 to 80.3 per cent in 1978-79. This is possible by a rise in the average rate of household saving from 9.5 per cent of household disposable income in 1973-74 to 10.2 per cent in 1978-79.

The contribution of Cooperative Sector is marginal and is not being taken up here for analyses. This is, in broad terms, the Planning Commission's strategy.

On analysing the above we come across the following loopholes:

That the amount of savings will grow from Rs. 6,136 crores to Rs. 10,708 crores -- a rise of Rs. 4,572 crores or a rise of 75 per cent appears to be a big leap.

The whole exercise seems to be a very weak one. This was the case with the mid term plan appraisal[2] and this is the case with the draft document (Fifth FYP). There are big unrealistic conditions attached to it.

The factor income is unlikely to increase because a large part of the investment is in infrastructure, methodological reasons of treating interest receipts as a reduction in interest liability on national debt rather than as factor income of Government and non-profitability of the enterprises in which shares have been invested.

The yield from the additional indirect tax revenues has been projected taking into account the various possibilities for the legitimate use of the instrument. Most of the indirect taxation is by the states where the indirect tax fills the need to cover the gap between the expenditure and income. Such suggestions as the legitimate use of the instrument are rarely taken into consideration. The result is that the indirect taxes are levied indiscriminately and on necessities which adds to the pressure on prices. It is difficult to think that cost economies if and when effected will lead to a lowering of prices. In an oligopolistic and monopolistically - competitive set up, the costs

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2. GOI, Fourth Plan Mid Term Appraisal, Vol. I, pp. 36-44.

can be reduced but even then the prices remain sticky. It is, therefore, difficult to accept the thesis that the economies of cost by neutralising "any" price raising effect of indirect taxes enlarge the scope of the later's use. A 75 per cent increase of indirect taxes is bound to exert an inflationary pressure. It is also difficult to think that the factor cost inflation will not be generated with this increase in the amount of indirect taxes on necessities.

That the income from public autonomous undertakings will grow from Rs. 634 crores to Rs. 1,636 crores, i.e., by Rs. 1,002 crores seems another difficult proposition. The draft document itself is aware "that the needed level of efficiency in the construction and operation of enterprises has not yet been attained. Over Capitalisation, delays, poor maintenance, under-utilisation of capacity and high costs are common experience."[2a] What then is the basis for the projected targets is not clear. In so far as additional revenues are going to be increased from a rise in the prices of public projects it will add to the inflationary pressures. Day in and day out we hear of the huge losses being incurred by prestigious public projects including some 'temples of steel'. It seems difficult that merely by occupying "a dominant position in some vital sectors", the profits will go up and the losses will be avoided. The resource position from this side appears to be a pipe dream.

Again the Household saving is expected to grow from Rs. 4,024 crores to Rs. 5,581 crores -- an increase of Rs. 1,557 crores although the household disposable income would decline from 83.9 per cent of GNP in 1973-74 to 80.3 per cent in 1978-79

2a. GOI, Draft Fifth FYP, p. 47.

appears to be only an exercise unrelated to reality. How the proportion of saving will rise when the share of GNP is falling seems difficult to achieve? The present high rate of inflation seems to erode the savings of the household sector. In view of this also it is difficult to imagine that a significant increase of savings in the household sector can come about.

The savings of private corporate sector are projected to grow by Rs. 294 crores but the basis of the assumption here are also not clear.

The fiscal framework is indicative of a soft state. Nothing short of a strict fiscal discipline netting in unaccounted surpluses and black money, running into several thousand crores, by any estimate, greater taxation of agriculture, a fundamental shift in the diversion of resources to public sector, taxation of urban immovable property and controlling some degree of inflation, taxing import licenses can bring in the 'revenue meat' and savings for Government and private sectors.

The tax arrears of Centre and States have accumulated at Rs. 800 crores and if tapped successfully can be a source of considerable help. The arrears of debts of Cooperative Societies run into Rs. 300 crores. Nearly Rs. 6,000 crores have been invested in public enterprises, a minimum of 10 per cent return will net some Rs. 600 crores. Some more possibilities exist in a better tax administration. There is a substantial scope for reduction in public expenditure, at least on frills, displays, ostentations, prestige and other forms of conspicuous consumption. Another direction for tapping resources is the agriculture tax. In India, the direct taxes have been showing a rise but the land

revenue has been showing a decline. While the direct taxes increased from 2.9 per cent of national income to 3.6 per cent in 1965-66, the proportion of land revenue decreased from 2.7 per cent to .5 per cent of national income during the same period.

	1938-39	1950-51	1955-56	1960-61	1965-66	1966-67
Tax Revenue as percentage of National Income	8.8	6.6	7.7	9.5	14.4	14.2
Direct Taxes as percentage of National Income	2.9	2.4	2.6	2.8	3.6	3.3
Indirect Taxes	5.9	4.2	5.1	6.7	10.8	10.9
Land Revenue	2.7	.6	.9	.7	.6	.5

The incidence of the indirect taxes is also on the urban rich than on the rural rich or poor. In an inflationary situation, the people are unwilling or unable to save. That probably explains the shortfall of savings as a proportion of National Income during the recent years.

The Public Sector has not been the best source of Savings. During the last 24 years the rates of tax to national income have been increased from 6 to 15 per cent. The rate of public savings to national income has risen only by 1.0 per cent of national income in 1950-51 to only 2.1 per cent in 1972-73. In 1973-74 this was still less. The household Savings are the most important source of Savings and with proper interest rate structure and taxation, these can be stepped up further.

The monetary policy has relied too much on selective controls. What is needed is a monetary policy of a macro character for increasing bank deposits. A drastic upward revision of the structure of deposit rates so as to favour medium term and long term savers will attract more deposits. The recent rise to 10 per cent on long term deposits is less.

Ultimately the real task of increasing the savings has to be tackled by turning to measures for increasing production and productivity. The proportion of savings cannot be increased with a stagnant level of GNP. Many of these measures have been spelt out in the last chapter. These can help in increasing domestic production and also enable S to increase over I, so vital for the reverse flows.

Chapter VII

IMPORT SAVING/SUBSTITUTION

A policy of import saving/substitution saves the foreign exchange and may make the same available for repayments. In this way, it eases the repayment problem. The policy of import saving/substitution has been roundly condemned as costly and unsuitable, besides its other blemishes. It is the purpose of this chapter to examine critically these aspects and find out whether all types of import saving/substitution are bad or a scope for the right type of import saving/substitution does exist for this country.

Import saving has been distinguished from import substitution. Import saving relates to: "(a) greater economy in the use of imported materials; (b) use of designs and technology which reduces the requirement of imports, and (c) substitution of domestic material already available for imported material".[1] The term import substitution relates to "capacity creation for replacing imports. In two respects, the two processes have distinctly different implications: (a) time lag for replacing imports, and (b) investment requirements for achieving this end. The time lag as well as the investment required for import savings is much less".[2]

Since the substitution of the domestic material, already available, for imported raw material is also for greater economy in the use of imported material, part (c) of the definition of

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1. NCAER, Development Without Aid, New Delhi, p. 28, footnote.

2. Ibid.

import saving is contained in part (a) and is unnecessary. Again part (b) of the definition of import saving, i.e., the use of designs and technology which reduces the requirement of imports may lead to some capacity creation and get mixed up with the definition of import substitution and hence this part has to be dropped.

It does no violence to the concepts to define import saving as greater economy in the use of imported material. Import rationalisation and reduction (of articles considered inessential) are the forms of import savings and import elimination, avoidance, abolition are its limiting cases. For import substitution, the definition of "creation of capacity for replacing imports" seems all right. It also seems difficult to accept the distinction of 'time lag for replacing imports' if it is implied that import savings always mean less time lag. It can happen, sometimes, that finding a domestic material (already existing but less known) for import saving and making it eligible to the people may take more time than capacity creation.

Several methods have been suggested for measuring the degree of import substitution. One method is to express it as a ratio, M/T (Import of commodity divided by the availability of indigenous product). A decline in this ratio should lead to an improvement of import substitution. The defect in this method is that if there is a decline in the demand (and no capacity creation and hence no import substitution) it may show greater import substitution.

In another method, the measurement of import substitution has been expressed with the help of M/Y, where M is equal to

import and Y is equal to national income. The defect with this definition is that this ratio may increase or decrease without any capacity creation. Another method is indigenous production/ total requirements of imports, but here also a decrease in demand for imports may show greater import substitution while there may be no capacity creation. One has to guard oneself against these pitfalls while dealing with these formulae.

Various factors lead to import substitution/saving. The import substitution industrialisation (ISI) may be due to the gradual expansion of the economy along with the expert-propelled path. As incomes expand in a country, industries come into being. The process has been described as 'Import Swallowing' by Hirshman. The industrialisation is through 'final demand linkage'. Another cause may be the role of war in destroying traditional ideas about the international division of labour and leading to domestic industrialisation at any cost. Another reason is the balance of payment difficulties created by the unwillingness of the advanced countries to open their markets to the less developed countries or balance of payment difficulties created by rigid exchange rates, combined with inflationary policies and ambitious development programmes. Still another reason is autarky. Here ISI is forced by the Governments by tariffs, fiscal policy and expansion of public sector. The route to self-sufficiency, in all these cases, lies through import saving/substitution.

The import saving/substitution industrialisation saves the much needed foreign exchange, eases the repayment burdens and may lead to the diversion of the scarce foreign exchange earned to foreign goods and services of higher priority. ISI reduces the impact of

fluctuations of foreign exchange receipts on the domestic economy. In one sense the ISI is relatively easier than capturing or establishing export markets. Export promotion programmes need competing with firms of longer standings, better maturity and salesmanship. Export promotion programmes may be countered by tariff restrictions and retaliatory export subsidies. ISI has, in this sense, an edge over export promoting programmes.

ISI programmes exploit the existing pattern of demand and promise much quicker returns than the establishment of new markets.

The ISI programmes may have, however, their own limitations Not all these are necessarily applicable to all LDCs. Most of these are limitations connected with indiscriminate and forced type of ISI. These are briefly stated below:

First, the gross savings of foreign exchange may not be equal to net savings of foreign exchange due to import substitution. There may be instances when the net savings from ISI may approach zero or a negative figure. An import substitution measure may stop the import of the final product but may increase the import of components and raw materials to assemble the final product. It is possible that the import bill on the final product may be lower than the total import bill on components and raw materials. In this case the ISI will not save any foreign exchange, instead it might increase its requirement.

Secondly, import substitution may necessitate protection leading to insulation of national market from external competitio and weakening or even destroying the incentive for improving quality and lowering cost.

The third limitation follows from the second. The high cost may reduce the profit margin (and do so more in those cases where it is already small) and thus discourage local production.

Fourthly, the smaller size of the market may reduce the economies of scale and the commercial adaption. It may encourage small uneconomical plants and weaken modern techniques. It is possible to counter this difficulty by the formation of regional co-operation units but their formation is again beset with many types of difficulties.

Fifthly, the slowing down of development may result from another side also. The limited internal purchasing power available in the complementary agriculture sector of the economy and the changing terms of trade with ISI programmes may inhibit growth in agriculture because of the increased cost of non-farm supplied output.

Sixthly, the changes in the structure of imports induced by ISI may have another dampening effect on production. The ISI programmes may necessitate an increase in an LDCs requirement for raw material and equipment in the process of restricting consumers goods imports. A policy restricting consumer goods imports but encouraging imports of raw material and equipment may inhibit the backward linkage industrialisation.

Seventhly,earlier stages of ISI which are confined to assembling or making consumers goods may be quite easy to cover. Later stages, in which the investment must move to capital goods and intermediate goods, both of more sophisticated technology, may be more difficult to cover.

Eightly, the greater possibilities of profits in the protected industries and greater difficulties in the export markets may shift resources from the export sector to protected industries. So what may be earned on the ISI may be lost (and perhaps more) on the export side.

Ninthly, by frequently fabricating shoddy manufactures at home, it retards the expansion of national product, employment and income. The argument, however, applies to an indiscriminate and aggressive type of ISI and not to all types of ISI.

Finally, a programme of outward-looking industrialisation, even though a partial one, has an edge over one with inward-looking industrialisation. Under the outward-looking industrialisation, there is an in-built pressure on managers, exposed to competition, to improve, cut costs, keep facilities and methods up-to-date and to improve their product and marketing. It teaches valuable lessons and upgrades human resources. The technology, skill and ability -- all receive acid test. The inward-looking industrialisation misses the inflow of ideas, techniques which are vital for an LDC because it gets insulated. With the help of outward-looking industrialisation, a country, though small, may better overcome the constraint of narrowness of market and get advantages of increasing returns. Countries which have devoted at least some resources to the outward-looking industrialisation do not experience the balance of payment difficulty to the same extent as those which have only concentrated on inward-looking industrialisation.

We now propose to examine critically some of the theoretical limitations stated above in so far as these pertain

to India and also discuss the scope of a right type of ISI in this country.

Ideas of import replacement, though not necessarily those of ISI programmes, have prevailed in this country since the Swadeshi movement. Our planners in the beginning thought that by a programme of ISI we could bridge the balance of payment gaps. This total reliance was abandoned only later although there has been a reaffirmation of faith, to a lesser degree, from time to time. ISI in this country, has been ignited by war and balance of payment difficulties but less by ideas of autarky. Self-reliance (rather than self-sufficiency and autarky), which is more of a financial concept meaning that a country must not go on depending on aid for ever and must close its external gap, have led to ISI programmes in this country. The Chinese war and Indo-Pakistan war ignited the urge to ISI in this country more than anything else. During the war, aid and supplies, so vital to the life of this country, were cut off or were threatened to be cut off. The country had, therefore, to look to its own resources.

All ISI is not an evil per se. We have earlier discussed that industrialisation of, what Hirshman chooses to call "import swallowing type" of "final demand linkage type" is not objectionable. This import substitution is natural for a country because the country has cleared certain production hurdles. This very much applies to India also.

Again the vast size of the market in India does not mean the same disadvantages of early grinding to a halt of consumer goods industries and non-operation of economies of scale.

In India, many raw materials are being imported not because these do not exist in India but because these have not been explored in this country or because the information regarding the local availability is lacking. There is a scope for import saving by substituting domestic material in all such cases.

The fabrication of shoddy goods with ISI may be a source of less domestic product, income and employment but, under Indian conditions, the non-utilisation of the local engineering talent and resources appears more responsible for unemployment, under-employment, less income and production.

The indigenous engineering talent is in a position to undertake the ISI at this stage in an effective way. It may be of interest to note that some of the engineers receiving awards at the Invention Promotion Board for less costly and better quality machines are not even academically so highly qualified. As late as 1965 a get-together of industrialists and scientists estimated the possible savings from ISI in the Fourth Plan at Rs. 900 crores.[3] Piecing the information together it reads as follows:

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3. Council of Scientific and Industrial Research, First Get Together of Research and Industry, New Delhi, 1965.

Table 1

Capital Investment Proposal in Selected Industry in the Fourth Plan and Possible Exchange Savings

(Rs. crores)

Sr. No.	Item	Estimated Investment		Possible Saving in Foreign Exchange
		Total	Foreign Exchange Components	
1.	Iron and Steel, Steel ingots, finished steel and pig iron	1,084	457.5	200
2.	Alloy, Tool & Stainless Steel	114	54	20
3.	Aluminium	140	65	20
4.	Non-ferrous Cu,Zn, Pb	76	28	8
5.	Steel Structurals	38	12.75	6
6.	Cranes	10	2	1
7.	Cast Iron Rolls	15	5	4
8.	Road Rollers	2.5	.5	.5
9.	Other road and construction equipment	10	4	2
10.	Motor Cycles and Scooters	7.5	2.5	1.75
11.	Auto Ancillaries	25	8	5
12.	Tractors	23	9.5	7
13.	Fertilizers	306.3	134.4	50
14.	Petro-chemicals	121	56.3	25
15.	Paper and Pulp	150	55	25
16.	Synthetic Fibres	50	20	5
17.	Cables and Wires	65.5	24	15
18.	Coal Production	185.35	51	15
19.	Iron Ore	50	16.5	6.5
	Total	2,473.15	1,005.95	416.5

Source: Conferences on Research and Industry (CSIR), Key paper for Working Group Mechanical & Electrical Engineering, New Delhi, 1965.

Table 2

Saving in Maintenance Imports in the Fourth Plan

Sr. No.	Item	Estimated Requirement of Foreign Exchange	Possible Saving in Foreign Exchange
1.	Steel	500	120
2.	Alloy Steels/NML/CMERI/Ascon	150	10
3.	Aluminising instead of galvanising	-	10
4.	Fertilizer nitrogenous by shift of emphasis	134	30
5.	Fertilizers, P 205	58	15
6.	Rayon Pulp, Paper Pulp	69	20
7.	Automobile Motor Cycles, Scooters	182	60
8.	Auto Spare Parts & Equipment for Garages	40	10
9.	Railways	100	20
10.	Components for Machinery Industry	561	110
11.	Maintenance Spares for Machinery	360	65
12.	Hides and Skins	-	5
	Total	2,154	475

Source: Ibid.

All this may not represent a clear case of economic ISI, still it shows the extent of development of the indigenous talent for undertaking ISI.

There is a great scope for reducing the import bill in many lines by variety reduction and standardisation. A team sponsored

by National Productivity Council in 1963 found that because of collaboration arrangements "we need 94 different types of warp spindles to meet the requirements of textile mills. Each variety differs in small details as regards total length, top tip diameter, pully fittings, taper of blades, etc. As the spindle blade manufacturing involves 22 to 25 precision operations and as one small alteration in dimension involves changes in cams, machine settings, inspection gangs, etc. this creates maintenance problem not only in spares and components but also as regards technical personnel". Again we need the import of 1,500 varieties of steel because of collaboration and each country insists on its own brand. In all such cases, variety reduction and standardisation can induce ISI and bring about savings in the import bill. With variety reduction and standardisation the mass production becomes a possibility and costs are reduced. The capacity creation or ISI is induced. The Indian Standards Institute produced in 1957 a specification for paper insulated lead-sheathed cables. In a couple of years, a dozen manufacturing concerns undertook the production of this type of cables. Standardisation in ferrous, electrical and textile industries has helped the domestic establishment and stabilisation of these industries.

The development of standards for intermediates helps different ISI programmes. For example, steel wire is used for cable armouring, fencing and wire ropes and its standardisation has helped these industries. The codification of basic material, standardisation of the properties, composition and other details create a common language between the buyers and

sellers and increase the commercial intercourse. Standardisation of testing fights against some mistaken notions of alleged superiority of foreign goods and thereby creates conditions for the start of domestic industries. It may be stated that because of mass production these domestic industries can possess the economies of scale and a lower cost of production.

Again India has been paying royalty on patents in a number of industries while other countries do not do so. India must not pay royalty in cases where it is inessential.

It may be stated that not all types of ISI discourage upgrading of human material. The dependence on turn-key jobs where the bureaucrat of the public sector can lay the whole blame upon the foreigner in case something goes wrong, also discourages such upgrading. Here ISI is more useful for encouraging initiative and talent.

There can be a possibility of transition in some cases, from inward-looking industrialisation to exports. Indian-made razor blades were of poor quality, to begin with, but now these are being exported. The same is true of Indian sewing machines, cycles and electric fans which are catching foreign markets. If inward-looking industrialisation can have such a transition there is nothing wrong about it.

ISI need not necessarily be more costly. In quite a number of substitutes produced by Indian firms, the products are of international standard and can compete in cost with other industries of the world.[4] The rising exports in most of these

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4. Build Machines, Build India, GOI, Directorate of Technical Development, New Delhi.

goods, in the world market, are an indicator of this fact. In all these cases, ISI is not harmful.

In case of India, the royalties, patent fees and technical and professional charges have been quite high. There is a scope for reducing the import bill by properly regulating various agreements.[5] Here are some quotes from Kidron. The borrowing is liberal.

> " In the agreement between Stayer-Daimler-Push of Austria and Messrs Brijlal and Co, Lonavla, signed in 1961, the Indian party undertook to pay royalty of £ 13000 per annum, subject to Indian taxes, but in no case less than £ 6500 between the 5th and tenth year of the agreement's currency. The Austrian firm would receive, between Rs. 432,500 and Rs. 865,000 in royalty besides dividends on its equity and interest at 6% guaranteed by the Reserve Bank....
>
> 2. Two identical agreements concluded between Braithwaite and Co. (India) Ltd. and John Smith and Thomas & Sons (Rodley) of Britain ... provide for a 5% royalty on the net sales of machines, and 7½% on parts. Costs of drawings etc are extra.
>
> 3. ... An agreement between Atul Products Ltd. & the American Cynamid Co. ... provided for 2½% of net sales for each product in royalty whether or not this agreement has expired or been terminated during this period. In addition there were to be funds as are agreed upon as compensation before the departure of American technicians on secondment to the India firm, and all incidental and other expenses including all taxes paid by or on behalf of such persons, in addition to the costs of first class transportation, living accommodation and subsistence for such persons.
>
> 4. Ceat Tyres of India Ltd. undertook to pay a research and technical fee of 3% on net sales on the first 325 tonnes output per month, declining to 2½% on sales of over 600 tonnes per month; this was in addition to preliminary payments totalling Rs. 7.5 lakhs and an overseas purchasing commission

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5. Kidron Michael, Foreign Investments in India, Oxford University Press, London, 1965.

of 3% for machinery required beyond given output and 4% for raw materials.

5. ... Synthetics and Chemicals Ltd. undertook payment for technical assistance, know-how etc. to its American collaborator ... totalling Rs. 1.9 crores over a ten years period. (American collaborator's investment is no more than Rs. 1.5 crores).

6. ... In Madras Aluminium Co. Ltd. and Montecatini of Italy agreement ... foreign stake was Rs. 1.5 crores and payments for services -- Rs. 40 lakhs for engineering fees, drawings, and other assistance; Rs. 35 lakhs, for experts supervision and other services, and Rs. 45 lakhs, for know-how, totalling Rs. 1.2 crores. ... All this is in addition to dividend payments.

7. In case of a technical collaboration ... partners accept royalty - 5% of net sales subject to tax ... a lump sump of 25,000 Swiss francs in consideration to the capital spent by the foreign firm on the development of the contract and for extra payments in future to cover out of pocket expenses for some additional fresh designs and other manufacturing details from time to time.

An American dam consultant on a ten year contract was reported to be getting $ 28000 a year tax free (Rs. 10,000 a month) over and above his Indian expenses. The President of India was receiving Rs. 4,500 a month after tax, super tax ...)

An American firm wanted $ 100 a day per technician seconded to build the Government penicillin plant at Pimpri."

To conclude, it must be grasped that ISI is not a good substitute for/outward looking industrialisation. Whatever may be the raison d'etre, the economic case for it is not as good as promoting exports. It is also difficult to brush all ISI with a big broom -- at least in all such instances as given above.

The progress of import substitution in India has been significant in the last few years. This is also clear from the index of industrial production of machinery (excluding electrical machinery) industry which increased from 121.2 in

1961 (base year 1960 = 100) to 316.0 in 1965 and for the transport equipment industry from 116.7 to 206.3 during the same period. With recession later the upward trend has not been maintained for some time.

Machinery industry in which there has been more than 50 per cent saving in foreign exchange, as compared to the percentage of imports allowed in 1960 includes sugar mill machinery, cement mill machinery, dairy machinery, wheeled agricultural tractors, industrial and domestic refrigeration and air conditioning equipment, L.P. cylinders, reduction gears, diesel engines other than vehicular, electric motors and switch gears, railway wagons, passenger and goods lifts, cranes and auto leaf springs and coil springs. Industries in which the import content is presently less than 10 per cent include cement machinery, sugar mill machinery, railway wagons, transmission line towers, power driven pumps, passenger and goods lifts, building and construction machinery and many others.

An attempt is also being made in India to identify the areas where the import bill is significant (more than Rs. 20 million) so as to direct the development efforts of ISI to these areas.

In 1961, there were 492 units engaged in the production of 31 items of industrial machinery, with a total value of production of Rs. 1,342 million. In 1968 the number of units rose to 719 and they produced goods worth Rs. 4,026 million.

APPENDIX

A list of commodities manufactured in India, for the first time, in different years, given below, shows the progress of ISI in India. While the diversity of products indicates the technological progress, it incidentally disproves the thesis that more difficult ISI cannot be undertaken, at a later stage, by an LDC. At least, this is not the case for this country.

List of New Items Manufactured for the first time during 1960

(a) Engineering Items

1. Winches
2. Time pieces
3. Bicycle Tube Values
4. Snap Fasteners
5. Pressure Cookers
6. Postal Franking Machine
7. Pressure Stove Burners
8. Solvent Extraction Plants
9. Oliver Brown Stock Washers for Paper Machinery
10. Multi Cellular Heaters
11. Pneumatic Power Hammers
12. Cylinderical Grinders
13. Wire Nail Making Machinery
14. Wire Drawing Machine
15. Impregnated Type Diamond Drills
16. Diamond Grinding & Lapping Wheels
17. Pre-focus Bulbs
18. Washing Machine
19. Empire Cloth
20. Cinema Carbons
21. Mersteel Double Pen Recording Thermometers
22. Indicating Type Dial Thermometers
23. Chromel Alumel Thermo-couple
24. Temperature Recorders
25. Refractometers
26. Polarimeters
27. Interfenometers
28. Photo Copying Machine

(b) Chemical Items

29. Rubber Lined Fire Fighting Hoses
30. Jax Board
31. Jute Based Insulation Board
32. Tag Board

(b) Chemical Items (contd)

33. Infant Milk Food
34. Cheese
35. Chlorosulphoric Acid
36. Ammonium Phosphate Fertilizer
37. Nitro Chalk
38. Potassium Permanganate
39. Argon Gas
40. Monochloro Acetic Acid
41. Chlorinated Paraffin
42. Gasoline Finding Paste
43. Water Finding Paste
44. Foundry Casting Moulds Compositions
45. Pigments conforming to IS-445 and 446
46. Urea Formaldehyde and Malamine Formaldehyde Resins
47. Capillary Tubing
48. Optical Glass
49. Surgical Catguts

Items in which new ranges of production were established during 1960

(a) Engineering Items

1. Portable Typewriters
2. Toy Radio
3. Planning Machine of Modern Types
4. Slating Machine of Modern Types
5. Do-all Type Sewing Machine
6. Transistorised Sets
7. Brass/Copper Strips and Coils 37 to 47 SWG
8. Brass/Copper Strips and Coils 30 to 42 SWG
9. Micro-optic Theodolite
10. Pathological Microscopes
11. Binocular Microscopes
12. Agfa Synchronised Box Cameras

(b) Chemical Items

13. Calcium Carbonate - precipitated (special grade for tissue paper)
14. Cyanides of Gold, Copper, Silver and Zinc
15. U.F. Resins for Plywood
16. Pigment Dyestuffs (signed red, fast, yellows and pigment green B)
17. Viscose yarn of 75 denier

List of new items which were manufactured for the first time during 1964

(a) Engineering Items

1. Single Spindle Automat
2. Sewing Machines
3. Spindle Moulder (Wood Working)
4. Combination planning, Surfacing and Thicknessing Machines (Wood Working)
5. Programme Controlled Milling Machines
6. Plasting Injection Moulding Machines
7. Induction Melting Furnaces
8. Sanding Machines (Wood Workings)
9. Diamond Drawing Dies
10. Cold Chisels
11. Segmental Swas
12. Socket Wrenches
13. Gear Hobs
14. Tobacco Machinery
15. Disc Filter for Coal Washery
16. Insulation Testers
17. Hand Operated Calculating Adding Machines
18. Heavy Duty Zip Fasteners
19. Typewriters with Hindi Key Board approved by the Government of India
20. Tungsten and Molyedenum Wires
21. Burners
22. Lightning Arrestors
23. Heating Elements
24. Teleprinters Machines

(b) Non-Engineering Items

25. Borax and Boric Acid
26. Jakolite (Formaldehyde derivative of Sodium Hydrosulphate
27. Potassium Hydroxide
28. Platinum Sodium Catalyst Gauge
29. (i) Vat Olive Green Branch
    (ii) Vat Olive D.
30. (i) Benzeanthrone-Crude and purified
    (ii) Vat Gray 40
31. Hydroxochalalanium (Vitamin B-12G
32. Promethyazine (antihistomint)
33. Industrial Finishes (based on Acrylic)
34. Lacquers for colour cards by McCorquodale Process
35. Flourocent Paint Waterproof
36. Vaccum Metallising Lacquers
37. Phenolic Resins for Laminations (Water sumble)
38. Phathalocyanine Greene
39. Flushed Colours

New Ranges of Production Established in 1964

(a) Engineering Items

1. Ball and Roller Bearings
2. Transister Clocks

(b) Chemical Items

3. Bright Electroplating Salts and their Brightness and certain chemicals
4. Vatrous Sanitaryware

List of New Items Manufactured for the First Time during 1967 and 1968

Engineering & Chemical Items

1. Steel Measuring Tape
2. Dial Indicators
3. Precision Thread and Ring Gauges
4. Diffuser Plant
5. Carbon Paste Plant
6. Computors
7. Jewels
8. On-load tap changers
9. Commutators
10. Pantograph
11. Radiators
12. Diffusion Plant 1500/2000 tons per day
13. Industrial Filter upto 42° length
14. Filters, pressure Regulators, Lubricators - all the three combined in one unit used under pneumatic appliances
15. Industrial Screens looped wedge wire vibro woven wire, screen baskets
16. Animal Feed Miling Plants
17. Rubber Processing Moulds
18. Automatic and Semi-Automatic Oil Burners
19. Certain types of Foods Processing Equipment
20. Weighing Machines of the following types:
    (a) Predetermined Portable Weigher B.D.E. 3218
    (b) Dial Bench Platform Scales
    (c) Counter Scale, Type 2104/2108
    (d) Bench Scale Sheet Yeard 3305 A.A.
21. Compressors reciprocating type for Air Conditioning and Refrigeration 300 H.P. Capacity
22. Complete Air Conditioning and Refrigeration Unit for Transport Purposes

Engineering and Chemical Items (contd)

23. Trichloroethylene
24. Tetrachloroethane
25. Perchloroethylene
26. Wattle Extract
27. Amphotercin
28. Sylphanilamide
29. Sulphaguanidine
30. Vitamins D2 and D3
31. Grephitertectrodes and Arrodes
32. Amylpropionate Rhodinot etc.
33. Strepto-cyclin
34. Auro Fungin
35. P.V.C. Footwear
36. Anthraquione
37. P. Anisdine
38. O-Anisidine
39. Aceto-Acet Ortho Chloroamilide
40. Aceto Accet Anilide
41. C. Acid
42. Tobias Acid
43. J. Acid Urea

New Range of Production

1. Digital Voltameter
2. Transmitting Tube
3. Large size of Expl. Proof Electric Motors upto 30 H.P.
4. Large Size of Expl. Proof Motors in the range of 20 H.P. to 80 H.P.

The list in 1970-72 contains 23 more items.

Source: Build Machines, Build India, GOI, Directorate General of Technical Development, New Delhi, 1972.

Chapter VIII

INCREASING AID EFFECTIVENESS

The chapter examines the repayment problem within its own framework. If the productivity or the quality of the aid is better Y will exceed C+I and the repayment burdens will be less severe and vice versa.

Let us turn to difficulties relating to economic administration of Aid. The Estimates Committee (1968-69) of Fourth Lok Sabha, in its sixty third report found, that in 85 per cent of the cases, the replies of the public machinery on efficient purchases were not acceptable to them. It found that in some cases the Government of India had been "tricked by donors" due to less enlightenment regarding the procedures. The same Estimates Committee noted that "the utilisation of AID loans was held up for delay in the finalisation of specifications, clearance of goods at the Indian ports, finalising procurement orders or in finalising of contracts for want of drawings which appear to have been avoidable". Similarly, "the clearance of goods at Indian ports held up installation of Delhi C Thermal Power Extension Station". In case of Heavy Machine Building Plant, Ranchi, the Committee found "that the repayment of interest and principal were being made though the plant was largely unutilised". Again no arrangements were made for utilising, for two years, the Canadian assistance of Rs. 4.40 crores and Rs. 8.80 crores in 1964-65 and 1965-66, respectively. The progress of the First Czech credit was extremely slow. "The customs duty, wharfage and port trust charges escalated from

17.64 lakhs to 69.52 lakhs in clearance of the machinery imported by the now defunct Metal Corporation of India". In the case of Czech credit allocated for the "Foundry Forge Plant, Durgapur, the Government took over 22.5 years to place the first supply order against the credit allocation and during more than six years ending on 31st March, 1966 no more than 61.6% of the credit was drawn". In the case of Soviet Union, "the terms of loans were found defective because the repayment of interest and principal started just one year after the completion of the delivery of equipment although the benefits from long term investments took quite some time". According to Rao Committee, "the financial clearance for the Ophthalmic Glass projects with Russian collaboration was given only recently, though the credit provision was made in 1957 and negotiation of credit in 1956".[1]

Here are a few other quotes from the Eleventh Report of the Estimates Committee (1967-68):

> "Agreement for a General line of credit for £ 25 million was signed with the U.S. Ex-Im Bank on 21st August, 1964. The repayment in regard to loan are to commence from 1st June, 1967. It is, however, noticed that on 31st March, 1966 only £ 7.00 million were drawn against this credit.
>
> Agreement for Ex-Imp credit of £ 27 million to Coromondal Fertiliser Limited was signed on 16th April, 1964 for the construction of a fertilizer plant at Vishakha-patnam. The repayment of loan is to commence from 30th June, 1968. By 31st March, 1966, however, only £ 8.15 million were drawn against the credit.
>
> Large balances have been indicated as remaining undrawn on 31st March, 1966 against U.S. DLF/AID credits granted in 1963 for power projects as follows:

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1. V.K.R.V. Rao, Report of the Committee on Utilisation of External Assistance, Ministry of Finance, GOI, 1964.

(in £ million)

Project	Date of loan	Amount of loans	Amount drawn as on 31.3.66
(a) Delhi - C Thermal Power Extension Station	8.3.63	16.00	5.97
(b) Satpura Thermal Power Project	8.3.63	25.10	11.5
(c) Ramagundam Thermal Power Project	21.5.63	8.4	1.6

A Soviet credit for the second plan amounting to Rs. 59.35 crores was agreed on 1.1.1957 while the two credits for the Third Plan aggregating Rs. 238.11 crores were extended at the beginning of the plan, the first about 1½ years prior to the beginning of the plan in September, 1959 and the second at the beginning of the plan period in February 61. Till 31.3.1966 against the industrial credit authorised for the second plan, orders were placed with the Soviet authorities for 77% of the value authorised while actual drawals constituted only 73% thereof. In the use of industrial credits for the Third Plan, the value of orders placed and actual drawals till 31.3.1966 constituted only 65% and 54% of the value authorised. A sum of Rs. 3.04 crores was allowed to lapse because additional projects could not be proposed in case of ENI credit of Italy.... The original agreement with ENI specified that no new credits, except those included in the agreement and its supplementary list, could be financed. The second IDA loan for Koyana Power Scheme, in 1962 was delayed because the basic decisions on the location of the dam and the proposed aluminium factory to which the power was to be supplied were not taken. The disbursement of IDA credits in case of Salanadi Irrigation Project in Orissa were stopped in May 1963 because IDA team which came to review the progress of the project noticed that considerable changes were made in the scope and design of the project. These are delays in authorisation and utilisation."

The Rao Committee[2] has listed several examples of lags, (from 4 to 20 months) between pledging and authorisation of aid from practically all sources. Not all of these cases of delay are to be attributed to the foreigners. For example, in case of USAID credits in 1966 (June), the Indian Government "took more than six months to file the draft consultation agreement with AID and more than three months to reply to the queries. After the loan agreement was received from AID four more months were allowed to lapse before the loan agreement was signed"[3].

The difficulties involved in the lengthy procedures add to the languishing (non-utilisation) and inefficiency of the projects. Thus "in loans from US Agency for International Development for non-project imports and imports from the private sector, legal opinion of the Attorney General of India in support of the validity of the agreement, nomination of the officers who will transact business with AID, approval of AID to the various items eligible to be financed, submission of engineering plans, details of contracts awarded and scope of consultancy services are necessary"[4].

The checklist of statutory provisions which must be met before a loan from USA can be granted has "sixty eight separate items and is still growing. It requires that the project is economically and technically feasible, that the country maintains

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2. Ibid.

3. Ibid.

4. Pearson Commission Report, Partners in Development, Report of the Commission on International Development, Praeger Publishers, London, 1969.

the rule of the law and places no restrictions on US fishing vessels. Even when the orders go to traditional suppliers, the competitive bidding and wait for replies takes its own time".[5]

Aid tying by source and project are also responsible for delays. In the case of Canadian credits, the requirements have been that (a) goods must be bought in Canada; (b) the goods should have a certain minimum percentage of Canadian content; and (c) the contract between the Indian importers and the Canadian supplier must precede the credit agreement with the Export Credit Insurance Corporation.

Since many donors are dealing with India and they have their own rules, regulations and procedures of giving aid the situation becomes complex. All the deals are not being handled by men with professional competence. The responsibilities for some delays lie with the foreigners and not with Indians. "The defective designing of coking unit of Barauni Oil Refinery and the non-completion of other units there were responsible for delaying the full utilization of capacity by eighteen months".[6] Similarly the expensive over-building of the Bokaro Steel Plant, by the Soviet Union, as pointed out by the Indian firm, M.N. Dastur & Co., was responsible for delays in the initiation of the work.

Other avoidable cases relate to non-coordination among various Government agencies. A blast furnace of Bhilai Steel Plant completed in May 1966 could not get electric power till

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5. Ibid.

6. V.K.R.V. Rao, Report of the Committee on the Utilisation of External Assistance, p. 6.

November 1966 from Korba Power Station because of a price dispute in the supply of coal by National Coal Development Corporation to Korba Power Station of the Madhya Pradesh Government. Other cases of avoidable delays relate to supply of complementary factors or inputs. The Security Paper Mill at Hoshingabad was commissioned late because of shortage of buildings, steel, suitable contractors and qualified personnel.

Since men make procedures there is a possibility of reducing the procedural obstacles and of simplifying many of these. Most of the delays in pledging and authorisation, in authorisation and utilisation which decrease the efficiency of aid relate to the weakness in Indian planning techniques. Some improvements will occur in learning by doing since aid is a new phenomenon. There are bound to be some mistakes and setbacks, but to suggest, however, that all these delays are in-built in the scheme and that these are 'fundamental'[7] is not plausible. The avoidance of delay in the placing of orders after the assistance becomes available, adequate advance planning of projects and readiness with alternative projects before these are proposed will cut delays and increase the aid efficiency. Similarly negotiation for the change from letter of commitment procedure to direct payment method as done by UK and IBRD will be a step towards simplifying the procedure.

The terms of aid -- interest rates, grace years and maturity periods -- have been quite hard in the earlier years. Theoretically the rate of interest that a borrowing country can

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7. Ibid.

afford to pay on external borrowings to cover its investment -- saving gaps can be as high as not to let interest charges rise faster than the rate of rise of the national product, for then the interest charges would snowball into a debt default. Similarly the tendency of elimination of grace periods and reducing years of maturity can be extremely burdensome for a borrowing country in many situations. The LDCs, oppressed with huge pressures of population, low levels of education and capital need considerable relief. The recent tendency of the international agencies and some countries to charge very low rates of interest, give longer grace periods and longer years of maturity, are welcome. The debt burdens, in case of India, increased sufficiently as a result of second and third plan borrowings, because of the predominance of commercial rate of interest, lower years of maturity and lower grace years. Whatever reasons there are for retaining interest charges on aid to LDCs are psychological, in the sense that LDCs out of self respect will not accept outright charity. In actual practice there is a need for softening the terms of aid.

The softening of the terms of aid will lead to only a gradual easing of the situation in the long run. If, however, there is a massive bunching of repayments, as it is in case of India during the next few years, the remedy will lie in a planned rescheduling. There is also a need for simplifying the rescheduling process. These processes have been quite time consuming in the past. There is a need for pre-planning rescheduling in accordance with the projections of debt servicing ratio and there is a need for liberal rescheduling especially in

case of India because of its structural problems regarding export expansion rather than her temporary difficulties. It will be good if a Bisque Clause can be got introduced when the repayment burdens are quite heavy.

The financing of India's long term plans with annual allocations has been another source of uncertainty in Indian planning. It has militated against bold, long term and productive policies. The US aid programme now operates on a two year authorisation from Congress but it has annual budget appropriation. The actual results fall short of the Pearson Committee recommendation of appropriation periods to at least three years and permitting appropriation funds to be carried forward for several years.

Another glaring defect with aid to India has been what Earl Gainstead, British Minister of Overseas Development, pointed out in "trade following aid". The DCs equip a country with factories and there are orders for replacements and spare parts. Aid has not proved, in other countries as well as in this country, a device for ending aid or a short term phenomenon but a means of perpetuation. This is indeed a sordid commentary on aid giving. The Fourth Five Year Plan puts maintenance imports or imports of raw materials, components and spares needed for sustaining and accelerating the growth of industrial and agricultural production at Rs. 7,840 crores. With each aid deal, in private or public sector, the number of differentiated products, heterogeneous and diverse items have increased leading to a continued import of these items. Aid is of use if it spurs indigeneous use of resources and if it triggers off domestic entrepreneurial activity. If it increases the need for more imports, it does

not transmit developmental impulses.

The avowed function of aid, in many cases is to reduce the saving investment gaps and the import and export gaps. In reality, in some cases the policies of the donors achieve just the reverse and enlarge the trade gaps and increase the need for more aid. For instance, in case of India, the US aid laws do not permit trade with Cuba. The USSR insisted, in the past, that wagons export to that country must be from USSR-aided factories. In case of USA, we have to get imports of US wheat in US bottoms. This creates idle capacity of our shipping and also increases the trade gap. In the past, USA insisted that we divert the area under cotton and tobacco to wheat and import these commodities, under PL 480, from USA. USSR insisted that the consultancy for Bokaro must be had from that country and not from the Indian firm, M/s Dastur & Co. Similarly, Germany has been charging a huge consultancy fee, which is quite avoidable, from this country.

In the present system of aid giving, aid is burdensome because it is tied to purchases from the donor countries but repayments are not tied to purchases from receiving countries. The donor countries must open their economies to goods from the recipient countries. An alternative form can be like this. Suppose India owes £ 10 million to USA in the form of amortisation and interest, India can place goods worth £ 10 million at US disposal. Suppose, USA now wants to give £ 100 million to Ceylon, USA can give £ 90 million herself and ask India to give £ 10 million worth goods to Ceylon, thus offsetting her obligation to USA. Still another variant has been suggested by Khatkhate[8]

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8. Khatkhate, "Trade Promotion Through Debt Servicing", E.P.W., February 1967.

in the developing debtor country lending to another developing debtor country (whom the developed creditor country wants) through the medium of regional development bank and thus offsetting the obligations to the developed creditor country.

One more reason of the less productivity of aid to this country is that aid has been obtained on the basis of the availability and not on the basis of need. The chances of getting less productive aid when obtained on the basis of availability are more. The costly programme of community development was inducted due to the American inspiration. The Heavy Engineering and Heavy Electrical Plants, and Bokaro were due to the Russian influence. The mood of bringing aid within the ambit of volition and choice has been visible in this country only with the temporary cessations of aid to this country during hostilities. The element of selectivity has been given thought to only during such periods. On all other occasions aid has been obtained more or less indiscriminately on the basis of availability.

One remedy, for avoiding wastage, and making aid more effective, suggested by Professors Shenoy and Friedman, is borrowing through the capital markets. This, according to them, will check inefficient management and corrupt practices and the misdirection of the aid. It appears rather doubtful whether the bureaucrat will improve vastly his practices if the Government changes the method of borrowing. For LDCs having a considerable burden with less commercial rates of interests, sufficient years of grace and maturity, these (burdens) will be all the more severe with borrowing through the capital markets. The suggestion

is more a measure of punishment of the LDCs than provision of any relief to them.

A word for the donors. It is true that if the LDCs maintain a considerable degree of vigilance with respect to the moves of DCs, the aid efficiency can be stepped up. Most of the LDCs are in dire need of aid and they dare not look the 'Aid Horse' into the mouth. They have a low degree of knowledge and administrative and operational efficiency. They can be easily out-manoeuvered by the advanced countries and the latter bent upon nationalistic, military and strategic interests are in a position to diminish the real value/quality of the aid. It is, however, unlike being partners in the development, if the advanced countries are tricking their undeveloped partners instead of helping them.

The multilaternalisation of aid does help remove some of the blemishes, attached to aid tying, which will be discussed in the next section. The best remedy is to purify aid from considerations of cold war and nationalism. It is only when consideration of compassion and of solidarity with the poor are uppermost with the donors that the need to scrutinize the aid disappears and quality of aid becomes better.

This section discusses the disadvantages which can flow from aid tying. Foreign aid has come to be increasingly tied in different countries. The tying restrictions are common to countries having deficit or even surplus balances. The obvious reasons are the actual balance of payment difficulties of the deficit countries (Britain, USA), alleged fear of such difficulties by surplus countries (Italy), the pressure by commercial interests within the aid giving countries to get export orders

(like Germany) and fear of loss of real income (by all surplus countries). The reasons in project tying are a quicker aid utilisation and/or the desire to pick up political kudos by being identified with more conspicuous things. The empirical estimations of aid tying in India is a big project and its costs are under study by the UN.[9] It will not be out of place to mention some of the harms of tying to LDCs in general and many of these are very much true in case of India and suggest possible ways of de-tying.

The share of total tied aid from its inception to 1973-74 is still 80 per cent of the total aid. This is clear from the table given below:

Table 2

Share of Untied Credits in External Assistance

(Amount in Rs. crores)

Period	Total External Assistance	Untied Credits	Share of Untied Credits in Total Assistance (per cent)
1	2	3	4
Upto First Plan	317.7	53.2	16.7
During Second Plan	2,252.6	516.0	22.9
During Third Plan	4,531.0	603.3	13.3
1966-67	1,131.4	183.1	16.2
1967-68	1,195.6	253.0	21.2
1968-69	902.6	156.5	17.3
1969-70	856.3	196.3	22.9
1970-71	791.4	160.6	20.3
1971-72	834.2	177.9	21.3
1972-73	666.2	277.6	41.7
1973-74	849.3	451.1	53.1
Total	14,328.5	3,028.6	21.1

Source: GOI, Economic Survey, 1974-75, p. 110.

9. UNCTAD II, Second Session, New Delhi, Vol. IV, p. 72.

Aid can be tied to a particular source or to a particular project. Aid tying by source restricts the recipient country's choice in spending aid funds on imports from countries other than the aid source. Aid can be tied formally or informally, directly or indirectly.[10] Formal restrictions are the clearest form of source tying. Informal tying may be by pressures exerted by donor countries on the recipient country or by pressures exerted by local dealers in the recipient countries themselves or of persons having special links with a particular donor country. Direct tying includes aid in kind, technical assistance, expenditures and export credits, "it constitutes a significant portion of total aid flows and can involve excess costs".[11] Indirect tying consists of financing only those commodities or projects in respect of which the donor country appears to have a strong competitive position".[12]

Tying reduces the value of aid to the recipient countries. It creates excess cost paid by a recipient country as a consequence of restrictions or it imposes a higher effective rate of interest charged.

There is no cost of source tying if the recipient country uses aid for its former normal imports from the same source and spends its released resources elsewhere. Thus an LDC A may be getting its normal imports of wheat worth $ 100 million from USA.

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10. The classification is in the manner of Prof. J.N. Bhagwati's paper in UNCTAD II, Second Session, Vol. IV, pp. 45-67.

11. Ibid.

12. Ibid.

If A is granted source tied aid of $ 100 million by USA and spends now this aid of $ 100 million on imports of wheat from USA and spends its own $ 100 million on imports of machinery from UK it has avoided the effects of aid typing. If the source tied aid of USA is also project tied (to machinery from USA) then it is difficult to avoid the effect of aid tying (except when A was already importing machinery from USA). Thus the possibilities of switches are more in single tying than in double tying. The successful switches involve a high level of free foreign exchange at the disposal of country. A low level does not promise much manoeuvrability for switching. If a country has a high degree of dependence on a single country, then it is difficult to escape the tying cost. The dependence of the LDCs on a single source seems pronounced, the median ratio being 64 per cent.[13]

Most developing countries are not in a position to evade much of the cost of tying -- direct and indirect. Direct costs are the excess of the delivered price over the lowest would-have-been-paid price. Indirect costs relate to excess costs of spare parts on imports of the original (tied) purchase. Indirect costs also arise due to monopolistic practices by suppliers from the tied source. Other indirect costs relate to the lack of interest in servicing and machinery, in follow up measures and personnel training. These may mean developmental costs which may interfere with plan formulation and implementation, with technology choice, selection of projects of unsuitable nature like more capital intensive, automated and sophisticated, adoptions of techniques of production of the donor countries, non-replacement of certain type of equipment from the same source even when bought with the country's own resources.

13. UNCTAD II, Second Session, New Delhi, Vol. IV, p. 74.

Untying is difficult in case of deficit donor countries; the surplus countries are in a position to take the lead in initiating the process. Even in their case (surplus countries) gradualness (relaxation by some percentages) may be more helpful to them. It would help if the donor countries avoided double tying, by source and by project which leads to monopolistic and serious exploitations.

Competitive international tendering is considered to be another remedy. In practice, tendering is followed by a very few recipient countries. Even if it is followed, certain difficulties are hard to avoid. The sequential character of the aid flows prevents simultaneous tendering. If there is a limited flexibility in tendering, there are possibilities of monopolistic action. Again there can be collusive action by tenderers, more when tenderers are a few, amounting again to monopolistic action. In many cases the quality and specification differences also prevent the desire to invite tenders. Another difficulty is that tenders are supplied only if the seller thinks that the buyer is serious about buying and not about mere queries for the prices.

A shift to multilateral aid instead of the bilateral will increase the chances of buying from a relatively competitive counter. It has, however, to be reckoned that a part of the multilateral aid is also tied and that multilateral aid is given to agencies which distribute it to the countries of the donor's choice. Bhagwati[14] finds that half of French multilateral

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14. J.N. Bhagwati, op. cit.

aid in 1960, meant for European Economic Community Development Fund, went to the former French colonies of Africa.

Vigilance against Aid Tying especially against defective forms of tying in India is necessary because of its possible disadvantages and because a great proportion of the aid is in the tied form.

Chapter IX

INFLATION AND EXTERNAL RESOURCES

"It is not surprising", wrote Haberler, "that poor and backward countries, when they wake up and set their minds to develop in a hurry to catch up with the more advanced countries, are continually tempted to overspend their meagre resources and live beyond their means".[1] The harm has been done to most of the LDCs. The inflation, despite the support of foreign aid to their meagre resources, has become a continuing process in India and other LDCs. The exact quantification of the impact of inflation on external resources is difficult to make. Some progress can, however, certainly be made, with reference to its effects, in an illustrative way.

The effect of inflation on external resources can be explained via imports, exports, capital movements and savings/capital formation. It is not denied that all these variables can react on one another. For example, exports and imports (and even their structure), capital movements (inflows and outflows) have got a great effect on growth and growth, in its turn, affects all these variables. While the effects of imports and exports and capital movements on external resources is direct, that of saving/capital formation is only indirect, in the sense that growth has the potentialities of generating export surpluses and closing the external gaps. It may be

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1. Haberler, "Quest for Stability, The Monetary Factor" in Hague, Stability and Progress in the World Economy, Macmillan & Co. Ltd., London, 1958.

stated that inflation has been used below not in the Lewis's[2] sense of injecting money into the system but in the sense of high prices (prevailing and continuing). It may also be added that while the effects on imports, exports, and capital formation are clear in the minds of the economists, those via saving/capital formation are a moot point. Thus, to quote only a few, Dewan[3] thinks that "the economic theory does not provide even a qualitative answer" to "the influence of prices on savings"; Quant and Thorp[4] feel that it has a soothing effect on the economy and Bernstein,[5] Dorrance[6] and U.S. Commission on Money and Credit[7] feel that "it is positively harmful to savings/growth". Further it may be added that effects of increase (decrease) in savings do not necessarily mean greater (smaller) capital formation. Mere savings are a leakage from the income stream unless there is a corresponding investment.

Let us examine the effects. When prices and costs rise in a country goods produced in that country become more costly than similar goods produced abroad. If there is no change in the exchange rate, it will lead to more imports and less exports.

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2. W.A. Lewis, Development Planning, Harper & Row, New York, 1966.

3. R.K. Dewan, "Effect of Prices on Savings", Economic Development and Cultural Change, Vol. 10, No. 3, April 1968, pp. 430-35.

4. Quant and Thorp, The New Inflation, Hill Book Company, 1959.

5. Bernstein and Patel, I.M.F. Papers, Vol. II, November 1952, p. 363.

6. Dorrance, "Inflation and Growth", Finance and Development, 1, 1, June 1964, pp. 32-38.

7. U.S. Commission on Money and Credit, Study Group - I, Tibbor and Anne A. Scitovsky, Research Study Eight.

Not only the rest of the world will buy less from the country with inflation but people in that country will also buy less in their own country. Dorrance finds that "Argentina, Bolivia, Brazil, Chile and Haiti, with long histories of inflation, have not been able to maintain the volume of their exports at even pre-1913 levels, while their more stable competitors have advanced"[8]. Lovasy[9] finds that during 1953-59, exports of countries with mild inflation rose on average by 27 per cent against a 35 per cent increase in those of stable economies. If exports depend upon import of raw materials, spares and components (as in case of India) these will be discouraged due to falling exchange rates induced by inflation. In some cases the effects of inflation on traditional exports, because of their painful adjustment to the lagging demand, are more damaging. It is difficult to switch easily to newer lines or to expand home consumption of these traditional exports. Inflation discourages initiative, experimentation with new methods of production because of difficult competitive position on the international scene and thus may militate against the diversification and expansion of exports.

Not only the imports are increased but the structure of imports, resulting from rising prices, may also be rendered less desirable. Thus an LDC faced with balance of payment difficulties due to inflation may allow socially desirable imports and expose

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8. Dorrance, op. cit.

9. Gertrud Lovasy, "Inflation and Exports in Primary Producing Countries", I.M.F. Staff Papers, Vol. IX, No. 1, 1962, pp. 37-69.

home industries in such goods to foreign competition and restrict less desirable imports thus providing protection to home industries producing such goods.

External resources are affected by capital movements, induced by inflation. Inflation discourages the inflow of capital and fosters capital outflows. The net return in the country with inflation becomes uncertain due to rising prices of inputs. With the unpredictable exchange rates, the return in terms of investors currency appears uncertain and inflows are discouraged. Then the policies of exchange restrictions, during inflationary and difficult balance of payments period, frighten away the capital, and discourage inflows while the outflows are increased by repatriation seekers. In a country where prices are rising and there are inevitable fears of exchange depreciation, the gain lies in sending money out. Thus Dorrance[10] calculates that a Brazilian saving one per cent of his wages and investing these at 1 per cent (from 1959-64) would have 15,000 Cruzeires but one converting his saving into Dollars would have 45,000 cruzeires at the end of the same period. Therefore the chances for capital outflow are encouraged during inflation.

Inflation increases the profits of the entrepreneurs and it is out of these profits that additional savings may take place. Simultaneously, however, there will be a dissaving by the general public trying to protect their consumption standards with the lower purchasing power now and because of the reduction in the real income of some savers. The net savings will be a

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10. Dorrance, op. cit.

resultant of these two forces.

Continuous inflation encourages wrong types of investment. Businessmen accumulate inventories, the prices of which are bound to increase and these are a good collatoral for bank credit. Investment in high-priced buildings increases because of greater chances of appreciation in their value. The ownership of foreign assets (including gold) becomes tempting. All these forms of investment have greater ownership (private) benefits than use (social) benefits. The misdirection of savings into less productive lines like inventories, foreign assets, gold and buildings than agriculture or manufacturing or into luxuries because their prices are uncontrolled and have higher profit possibilities than controlled essential items, or dead assets reduce the flow of savings in the next rounds, through their adverse effects on national income.

Other types of distortions can also result and these may not be conducive to growth and repayments. For example, some sectors during inflation may get higher wages, due to strikes and threats, and reduce the position of other sectors. Eugenio Gudin[11] points out that in Brazil the labour improved its share of the national product from 56 to 66 per cent during 1947-50, while civil servants, professors, doctors and engineers had repeated set-backs in their positions.

The devices to control inflation, like exchange controls, guaranteed minimum wages to labour, may generate yet other types of distortions. Gudin[12] points out an interesting case of cheap

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11. Eugenio Gudin, Inflation in Latin America from D.C. Hague, Inflation, Macmillan & Co., London, 1962.

12. Ibid.

labour being replaced by expensive machinery because the cost of labour was raised by minimum wages and the price of machinery was lowered by special exchange rates. Distortions like these make the price mechanism lose its meaning and planning becomes complex.

During inflation, there are strong political pressures to protect important sectors of the community from the effects of inflation by control of food prices, transport fares and rent. The lower prices of these articles distort allocation of resources and inhibit development of these sectors. If the government resorts to subsidize food or meet the rising cost of transport when fares are held down it reduces the funds for undertaking government capital formation.

Inflation also inhibits the possibility of rational calculation of small margins of profits. The management is not afraid of higher costs because these can be passed on wholly or even more to the consumer. Inefficient labour is tolerated because of the greater demand for labour under inflationary conditions. The desire to improve performance and efficiency are checked with deleterious effects on growth.

Inflation generates forces among individuals and groups to save them from the harms of inflation. Trade Unions agitate for more wages, agriculturists press for price support, aged desire for pensions and more social security. The obvious result is social tensions and strifes, strikes and show-downs. It generates strange psychological effects of favouring the gamblers and speculators and bleeding the little fellows. It favours the imprudent debtor and harms the prudent savers. The

powers of inflation to create profiteers, hoarders, illicit practitioners, as its consequences generates and builds up tensions in the system harmful to growth and repayments.

The increased outflow of capital and decreased inflows, already mentioned, are relevant as much for growth as for reducing external resources.

The count for inflation is not negative on all scores. Inflation raises expectations of yield on investments more than the expectations of rises in interest. This margin helps investment decisions. It penalises the holding of money and may spur spending and investment. Lewis[13] sees in inflation the achievement of the primary objective of investment though he is less sure of the secondary consequences on investment. Others see in inflation "a force luring labour out of traditional and subsistence sectors into developing sectors". This is however, not the same thing as seeing in "creative inflation", a la Schumpeter and Keynes, "a great force for the economic growth" or finding a "Shakespeare rising the wave of inflation".[14]

The rise in the index number in India during the period 1952-61 can be considered modest. It can be said that the price level was more or less stable during this period. The all commodities index number in wholesale prices with base 1952-53 = 100 rose from 1953 to 125.8 points in 1961(see Table 1 in the Appendix).

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13. W.A. Lewis, Development Planning, Harper & Row, New York, 1966.

14. Haberler, Inflation, Its Causes and Cures with a New Look on Inflation in 1966, Rev. ed.

As compared to this we find that the index number with base 1961-62 = 100 rose to 200.7 in 1972. During this period the inflationary trends seem to have sufficiently strengthened themselves. The rise in the price trends seemed continuous and settled at 200.7 in 1972(see Table 2 in the Appendix).

After 1972, the rise appears still sharp. The general price level as measured by the official wholesale price index (Base 1961-62 = 100) recorded a rise of 16.1 per cent during January - June 1973 (see Table 3 in the Appendix). Average provisional price index for all commodities during January - June stood at 224.1 as compared to 193.0, for the period January - June 1972. The index reached the level of 239.1 in June 1973.

The price jump seems to be still bigger during February 1973 to February 1974. The index number of wholesale prices with base 1961-62 = 100 increased from 219.3 in February 1973 to 275.2 in February 1974. This indicates a serious development in the inflationary situations in this country. Still more critical is the development after February 1974. Between the end of March 1973 and June 1974, there is a jump of 90 points in the official index number. The virtual disappearance of necessities has made the situation alarming and created the potentialities of a run-away inflation (see Table 4 in the Appendix).

The major causes of inflation in this country are a rise in public expenditure, a fall in aggregate real supplies, ineffective anti-inflationary policies. Over and above the impact of macro effect, the micro effects of controls and black money on demand and supply sides and hence on inflation are important.

Development means an increase in investment expenditure and it also means a lag in the increased flow of consumption goods. This lag may lead to a rise in prices of consumption goods and in the general level of prices. To the extent that there are quick yielding projects in investment or increased investment is matched by increased savings, the inflationary effects can be neutralised. However, some inflation seems inevitable because of long gestation projects in development. A large increase in the volume of money unaccompanied by corresponding increase in the volume of output is the current cause of inflation. Table 5 in the Appendix gives figures of increase in money stock, monetary resources (i.e. money stock plus time deposits) output or national income at constant prices and the price level.

It shows that the rate of increase in money stock, has been above that of output. Thus between 1970-71 and end of June 1973 while output has increased by less than 5 per cent, money supply has increased by about 38 per cent. The wholesale index has been up by 60 points during this period. It must be emphasised at this place that the sloppy functioning of Government departments is also responsible for less aggregate output, besides the shortfall in agriculture and industry.

The shortfalls have led to controls, enforced mostly irrespective of any regard to income and price elasticities. Wherever a fixation of prices has been below the market prices it has bred black market. Since the black market prices are higher, efforts to control the prices have reinforced inflationary prices. Black money has shifted the resources into unproductive assets and in this way there has been further reduction in production and further reinforcement of inflation.

APPENDIX

Table 1

Index Number of Wholesale Prices Base 1952-53 = 100 all Commodities

	1953	1954	1955	1956	1957	1958	1959	1960	1961
All Commodities	105.7	99.6	91.5	102.7	108.7	111.7	115.5	122.9	125.8
Food	108.9*	98.2	85.4	99.0	106.8	112.0	118.2	120.2	119.5
Liquor & Tobacco	98.3	94.4	82.3	82.3	91.8	93.7	110.7	106.4	103.6
Fuel, Light and Power Lubricants	99.4	97.7	95.2	101.6	111.5	114.9	116.7	118.9	121.9
Industrial Raw Material	110.1	104.0	97.3	113.2	118.1	114.7	119.9	138.8	147.7
Manufacturers	98.8	100.4	99.4	104.9	108.0	108.2	109.7	120.9	127.2
Intermediate Products	98.4	97.7	97.6	110.0	108.6	109.4	111.1	127.1	138.4
Finished Products	98.8	100.8	99.7	104.1	107.9	108.0	109.5	119.8	125.4

* Average relates to 9 months only

Source: The Index Number of Wholesale Prices in India, Annual Number, April 1953- December 1961, Vol. VI, No. 53, pp. 2-4.

Table 2

Index Number of Wholesale Prices, Base 1961-62 = 100

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
All Commodities	104.1	107.9	119.1	128.9	144.3	166.0	165.3	168.8	179.2	186.1	200.7
Food Articles	107.4	111.7	130.6	142.0	161.9	204.4	200.5	193.3	203.3	207.0	230.6
Liquor & Tobacco	102.0	117.1	128.0	133.5	133.4	145.2	178.5	208.2	185.5	190.1	223.0
Fuel, Power Light and Lubricants	102.1	114.9	119.7	122.4	132.5	139.8	147.2	153.3	160.4	168.9	178.2
Industrial Raw Material	98.1	98.6	111.7	127.7	151.8	161.1	152.7	175.4	193.0	194.4	152.2
Chemicals	111.4	115.5	116.4	123.0	138.8	154.7	165.3	180.7	188.1	194.4	199.6
Machinery and Transport Equipments	103.5	107.2	110.8	116.1	124.0	131.1	132.3	134.7	145.2	156.1	166.1
Manufactured Articles	102.4	104.2	107.5	115.4	125.5	130.9	132.7	140.9	151.7	164.3	174.3
Intermediate Products	102.7	103.9	109.1	121.9	135.8	147.1	144.6	154.1	174.8	152.2	207.8
Finished Products	102.4	104.3	107.2	113.9	123.0	127.1	129.8	137.7	146.1	157.6	166.2

Source: GOI, Index Number of Wholesale Prices, New Series, Annual Number April 1962 to March 1970 and Annual Number January 1968 to December 1972.

Table 3

Percentage Changes in the Major Groups for the last two years

Groups	Percentage of rise or fall in 1971-72 over 1970-71	Percentage of rise or fall in 1972-73 over 1971-72
Food Articles	+ 3.1	+ 13.9
Liquor & Tobacco	+ 5.4	+ 19.6
Fuel, Power, Light and Lubricants	+ 6.4	+ 5.0
Industrial Raw Material	- 3.2	+ 6.5
Chemicals	+ 4.8	+ 1.9
Machinery and Transport Equipment	+ 7.4	+ 5.8
Manufactures	+ 7.9	+ 5.7
All Commodities	+ 4.0	+ 9.9 16.1 per cent in January-June 1973 over January-June 1972

Source: Index Number of Wholesale Prices in India, January - March 1973 (Partial Reproduction), p. 7.

Table 4

Index Numbers of Wholesale Prices - By Groups and Sub-groups
(1961-62 = 100)

	Feb. 1973	Sep. 1973	Oct. 1973	Nov. 1973	Dec. 1973	Jan. 1974	Feb.2 1974	Feb.9 1974	Feb.16 1974	Feb.23 1974
All Commodities	219.3	252.4	256.4	260.3	265.9	271.2	272.4	274.1	275.1	275.2
Food Articles	253.7	297.2	300.3	299.9	307.1	312.5	314.5	315.1	316.9	317.0
Liquor & Tobacco	242.9	245.7	249.1	250.7	252.6	252.7	263.5	263.5	265.6	264.7
Fuel, Power, Light and Lubricants	184.7	194.5	194.7	235.0	235.0	237.1	237.1	237.1	237.1	237.1
Industrial Raw Material	237.6	301.1	303.3	300.1	313.6	319.5	321.5	328.2	327.0	325.2
Chemicals	202.4	213.1	211.3	215.5	216.0	228.9	229.4	229.7	229.7	236.5
Machinery and Transport Equipments	170.4	179.9	181.6	181.7	190.2	195.8	192.0	194.5	197.4	197.5
Manufactures	172.1	186.8	191.0	197.9	199.1	204.0	205.3	205.8	206.1	206.6
Finished Products	182.2	202.4	209.9	215.6	217.4	223.3	224.5	225.2	225.8	226.5

Source: R.B.I. Bulletin, February 1974, p. 382.

Table 5

National Income, Money Supply and Price Index

Year	National Income (Rs.crores) At current prices	At 1960-61 prices	Money Supply with (B) Currency	Other deposits with RBI Demand Deposit	Total Money Supply	Monetary Resources (Rs. crores)	Price Index Wholesale Price Index 1961-62 = 100	Consumer Price Index for workers 1960 = 100
1960-61	13294	13294	2098	771	2869	3964	-	-
1961-62	14050	13763	2201	845	3046	4102	100	104
1962-63	14873	14045	2379	931	3310	4461	104.9	107
1963-64	17094	14845	2606	1147	3753	4976	113.3	110
1964-65	20061	15917	2769	1311	4080	5477	122.3	125
1965-66	20621	15021	3034	1495	4529	6134	137.5	137
1966-67	23903	15243	3197	1753	4950	6817	158.9	151
1967-68	28374	16660	3376	1974	5350	7460	160.3	172
1968-69	28678	17057	3682	2097	5779	8306	165.1	174
1969-70	31174	17955	4010	2376	6386	9336	175.7	177
1970-71	34253	18760	4383	2757	7140	10588	180.6	186
1971-72	36070	19171	4822	3316	8138	12314	192.3	192
1972-73	36573	18848	5424	3861	9285	14328	218.4	207
Feb.1973	-	-	-	-	-	-	219.3	-
Feb.23,1974	-	-	-	-	-	-	275.2	-

Source: 1. R.B.I. Bulletins, May 1973, May 1969, May 1966, February 1974.
2. Economic Survey of India, 1965-66, 1972-73 and 1973-74.

Chapter X

PRIVATE FOREIGN CAPITAL

It is intended to outline, in this Chapter, the theoretical benefits of private foreign capital in increasing the domestic production, strictly speaking, Y over C+I; whether these theoretical advantages actually flow in case of India or the impact is different; the contribution of this capital in generating internal surplus (making S > I), in generating external surplus (making X > M); and in providing a flow of free foreign exchange. The beginning is made with a study of growth profile and distribution of this capital and conclusion with a policy necessary for private foreign investment.

The reliable growth profile starts with the year 1948, the earliest year for which the Reserve Bank data are available. Before Independence, British foreign capital enjoyed privileges of almost sole access to the Government and a say in the legislatures in the early years. In matters of protection, purely Indian industries fared worse than their foreign counterparts. In transport, the rate structure encouraged foreign at the expense of domestic trade. The rate of exchange was kept higher for the foreign interest. The constitution of Reserve Bank, as a shareholders' bank than as an official bank, suited British private capital more than it did India. In staffing policy, Englishmen were in the front rank.

The predominance of foreign capital decreased due to isolation provided by War and Depression. Repatriation also grew faster after the Quit India Movement of 1942 and as a guess, Rs. 1,350 crores of British foreign capital was shipped out

between August 1942 and July 1948. The fears of regulation, anti-foreign discrimination, of take-overs and corners increased with independence. The official policy towards foreign capital immediately after independence was also not helpful to it.

Later events, however, changed official attitudes very soon. Food crises, the need for general imports and consumer imports and balance of payments deficits increased the need for foreign capital. The opposition to foreign capital decreased near the formulation of the First Five Year Plan. The Industrial Policy Resolution 1948, and the Prime Minister's statement in April 1949 encouraged the inflow. The swing left, or the socialistic pattern of society, in 1955 and Nehru's visit to China created uneasiness in the western capitals. After the Korean War slump, the foreign interest decreased in India.

The foreign exchange crisis in the Second Plan caused great concern for Government of India and several concessions like the watering down of majority Indian ownership of joint ventures, low taxes on foreign salaries and changes in wealth and super taxes produced satisfaction abroad and attracted private foreign capital.

After the Chinese War, conclusion of double taxation avoidance, inauguration of India Investment Centre and consideration of foreign shareholding on merits were necessitated for acquiring technical know-how from abroad.

The irritants to the private foreign investment still remain. These are vexatious and expensive delays in the issue of industrial licenses, the insistence on dilution of foreign interest in equity when extension of a foreign assisted undertaking is considered, shortening of the period of royalty payments to five years,

restriction on the employment of managerial personnel in joint enterprises and non-conversion of loans into equity.

The recent policies of Government to the left of the centre, desire to go ahead with more nationalisation, strict ceilings on land, ceilings on urban property (and perhaps on personal income) have fears for investments, domestic and foreign. The periods of fears and suspense have always been periods of cessation of inflows and of vigorous outflows, too.

The book value of outstanding private foreign investment is given below:

Table 1

Value of Outstanding Foreign Investment in the Private Sector

(Rs. in crores)

At the end of	From Private Sources	From Official Sources	Total
1	2	3	4
June 1948	264.6	-	264.6
December 1953	397.1	-	397.1
December 1955	439.7	2.7	442.4
December 1956	463.5	14.8	478.3
December 1957	484.3	47.7	532.0
December 1958	488.6	73.9	562.5
December 1959	498.9	83.9	582.8
December 1960	552.2	82.5	634.7
December 1961	580.5	99.3	679.8
December 1962	625.5	110.0	735.5
December 1963	694.5	111.6	806.1
December 1964	746.7	143.2	889.9
December 1965	830.2	164.8	995.0
March 1966	875.5	194.4	1,069.9
March 1967	980.1	250.5	1,230.6

Source: RBI Surveys.

The book values include fictitious revaluations, done at the time of partition, for obvious reasons. A better way of looking at the inflows is as follows:

Table 2

Flow of Foreign Capital to Private Sector

(Rs. in crores)

	1948-55	1956-60	1961-65	1966-67
A. From Private Source Abroad				
1. Gross Inflow	233.0	174.6	274.2	215.7
a) Fresh flow	117.0	108.2	162.1	182.0
b) Retained Earnings	116.0	66.4	112.8	33.7
2. Outflow	82.0	65.6	54.0	66.2
3. Net Inflow (1-2)	151.0	109.0	220.2	148.8
B. From Official Source Abroad				
1. Gross Inflow	-	89.2	166.4	135.3
2. Outflow	-	8.8	58.9	49.6
3. Net Inflows (1-2)	-	80.4	107.5	85.7
C. Total Flow (A+B):				
1. Gross Inflow	233.0	263.8	441.3	351.0
2. Outflow	82.0	74.4	112.9	116.5
3. Net Inflows (1-2)	151	189.4	328.4	234.5

Source: RBI Surveys

Among the sole ventures (branch form) plantation, mining, petroleum and manufacturing are important. The absolute value

of foreign investment has increased but the relative share in total private foreign direct investment has decreased due to the policy of the Government to discourage this type of investment.

Table 3

Growth of Foreign Branches: 1948-67

(Rs. in crores)

Sectors	Value of Net Assets of Foreign Branches Outstanding at			
	June 1948	December 1955	March 1965	March 1967
Plantation	40.0	68.8	100.7	96.4
Mining	8.0	8.5	4.5	4.3
Petroleum	21.0	82.6	76.4	58.0
Others	81.8	63.6	57.9	62.6
Total	162.1	234.1	262.2	248.3
Total Foreign Net Assets of Branches as Percentage to Total Private Foreign Investment Outstanding:	61.2	55.2	31.5	25.3

Source: RBI Surveys

As regards the foreign sole venture subsidiary organisations in private foreign investment in this country (a foreign subsidiary in which the entire equity capital is held by non-residents and there is no local ownership participation), the position is as follows:

Table 4

Industrywise Distribution of Fully Owned Foreign Subsidiaries as on March 31, 1964

(Rs. in lakhs)

Industry	Total		Registered after 1948	
	Nos.	Non-residents Contribution	Nos.	Non-resident Contribution
1	2	3	4	5
1. Agriculture and allied	3	223.60	1	6.00
2. Mining	3	29.50	1	15.00
3. Food Products	8	1,557.97	2	13.46
4. Metals & Chemicals	46	1,950.70	10	205.70
5. Other Manufactures	11	2,604.00	3	2,137.28
6. Utilities	3	101.02	-	-
7. Commerce	19	283.86	2	103.50
8. Transport	-	-	-	-
9. Business Service	3	7.90	1	1.40
10. Personnel Service	2	1.10	-	-
Total	98	6,759.65	22	2,482.36

Source: Government of India Company Law Board.

It is clear that the importance of sole-ventures, on the whole, is declining and their prospects are bleak due to restrictions placed by Government policy on starting such ventures in this country

The distribution of private foreign capital is relevant for knowing whether it has gone into the high priority or low priority lines, and this has implications for development. An industrywise distribution, during different intervals, in two decades is given below:

Table 5

Industry-wise Distribution of Private Foreign Investment

(Rs. in crores)

Industry	Outstanding at				
	June 1948	December 1955	December 1960	March 1965	March 1967
Plantation	52.3	87.2	99.6	114.1	114.1
Mining	11.5	9.3	13.3	11.4	8.7
Petroleum	22.3	104.0	149.0	182.0	164.9
Manufacturing	70.1	127.1	184.1	367.0	461.0
Food Beverages	10.1	29.0	34.3	36.0	40.2
Textiles Products	28.0	21.8	22.1	42.2	48.6
Transport Equipment	1.0	3.6	8.5	24.6	32.8
Machinery and Machine Tool	1.2	5.0	9.0	25.6	31.1
Metals and Metal Products	8.0	9.1	17.8	55.1	66.8
Electrical Goods	4.8	14.6	19.2	30.9	44.7
Chemicals and Allied Products	8.0	20.3	35.1	85.0	122.0
Miscellaneous	9.6	23.7	38.1	67.6	75.0
Services	108.4	112.1	106.2	155.7	231.2
Total	246.6	439.7	552.2	830.2	980.1

Source: RBI Surveys

As indicated in the table, the private foreign liability has shown an increasing trend. The additional inflow of investment is negligible due to Government policies. The rising trend is due to, perhaps, revaluation of fixed assets of the existing investment.

In the table above, mining shows disinvestment. The share of manufacturing and petroleum sectors at the end of 1965 increased as compared to 1948 level. The inflow increased particularly after 1960. In the food beverage group, the concentration of private capital is in milk-powder, malted foods, cigarettes and baby foods. In the textile group, there has been a decline in cotton and a gradual passing over of jute and coir goods into Indian hands. In transport, the growth has been in piston, fuel injection, sparking plugs and accessories. The technology has received more attention than capital investment in this sector. There has been a higher proportion of portfolio investment in transport equipment and machinery. In metal products industry, the bulk of investment took place after 1960. In iron and steel, the private foreign investment is negligible. In tin plate, tungston carbide, copper refining, zinc smelting, aluminium, the contribution is significant. The increase in electrical goods is modest and it is now on the decline. The chemical and allied groups received an increasing share especially after 1956. The investment is in the form of direct investment here and has a concentration of medical and pharmaceutical products.

Private foreign capital has certain special advantages. It reduces the burden on the tax payers of the lending country. In all likelihood, the private foreign capital will be employed more productively because it is motivated by business considerations and handled by men of proven business acumen (rather than by the salaried bureaucrats). When it is in the form of direct business investment, it transmits new techniques, new ideas and entrepreneuri skills. It cuts the need for rediscovery and duplication which are

wasteful. Direct private investment is the embodiment of technical innovation which is at the root of modern economic progress. It is constantly striving, constantly creative, researching and progressive. The stock of private foreign investment is a beacon of modernity and superior skills in a sea of traditionalism and backwardness. Its very presence stimulates better attitude formation, changes institutions and acts as a great force in upgrading human material thus overcoming barriers to growth.

The accent of private foreign business is on efficiency. Leaving some cases of monopoly positions, the private foreign capital has to take competition into consideration. It has to strive to be efficient. It has to act with speed and flexibility and has to be self-motivating and self-directing. The private foreign investment, and for that reason, any private investment, does not look to, or wait for initiation from Government or many superior authorities. Its ability to improve quality and reduce costs is proven. It possesses a whole range of marketing skills. Its knowledge of markets and hold on consumers' psychology are of a considerable importance to the recipient country.

The complementary factors like advanced technology, specialised skills and modern management practices which are transferred with this type of capital reduce bottle-necks to growth and generate external economies in the growth process. These complementary factors lead to a higher marginal return to capital, efficiency and cost-reduction which, in turn, widen the market and lead to widening and deepening of investment and further economies.

The transfer of capital and complementary factors may bring about a change in the comparative cost advantage. They may produce a structural change in the production and a structural change in the foreign trade sector. It may also promote exports. The host country may start using its own raw materials and bring about import substitution.

There are bright chances of reinvestment of private foreign capital in expansion or modernisation or investment in related spheres. The return on private foreign capital is flexible but that of the interest and of the amortisation of public foreign capital is usually rigid. The private foreign capital may increase domestic investment by collaboration agreements, creation of similar type of industries with differentiated products or inducing ancillary industries to come up. Again, private foreign capital of the equity type makes a real addition to the productive capacity while public investment may be devoted to unproductive uses or may even be stolen.

The private foreign capital distributes large amounts of money to various factors of production. It disburses wages to workers and other employees, taxes to Central and State Governments, local payments for the purchase of raw material and machinery and all these disbursements may increase the growth of the national income of the host country. It may create employment opportunities of the kind which do not exist before.

There is a reason to believe that there has been indiscriminate import of foreign capital and technology in collaborations in many cases. This has resulted in less utilisation of indigenous know-how, raised the demand for foreign exchange to meet the import

of capital goods and raw materials, etc. The multiple collaborations (approval in already existing product lines) have meant avoidable repetitive import of the same/similar technology. In many cases, multiple payments to the same foreign parties for the same/similar products have been made. The multiple collaborations have also produced a variety of differentiated products, multiplicity in varieties leading to inventory accumulation and uneconomic locking up of working capital, excess capacity and high costs. Under the head of initial services, the private foreign collaborators have got assigned and reaped substantial fees for functions like preparation of detailed drawings of utility items and factory buildings, civil engineering works, selection of plant site, preparation of market reports, etc. Many of these functions can be done by Indians. The machines, in many cases, have to be supplied by foreigners and this gives them the opportunity for raising the price of the machinery. The foreign collaborators make drawings etc. and this gives them a chance for increasing the need for machinery. Another reason for introducing too much machinery is that technical fees are computed on the basis of value of imported machinery.

The policy regarding the royalty is that it is upto 3 per cent if recurring and not above 5 per cent (taxable) of the annual turnover for a period not exceeding 10 years. The cases requiring higher payments are taken up by Foreign Agreement Committee. In actual practice, the normal royalty of collaboration agreements is upto 5 per cent. There are instances of royalty rates being above the maximum permissible limit.

There are also instances of graduation of royalty varying with production and royalty as a certain percentage net of taxation.

There are a number of restrictions on the local enterprise. There are restrictions on the divulging of production know-how, on its transferability and sub-licensing even after the agreement. The result is that new entrants have to seek fresh agreements and make payments for importing the same know how and this increases the collaboration multiplicity. Certain agreements restrict the Indian ventures' right to manufacture within this country only and thus restrict the growth abroad. Another restriction forbids Indian ventures to introduce changes in technology transplants. The step reduces the usefulness of the capital for India, restricts local experimentation and retards assimilation of know how. Another restriction makes it compulsory for Indian ventures to purchase requirements from foreign collaborators. This ensures a continuous export of materials, components and spares on non-competitive terms from the collaborators. It also raises the import bill for India and raises the possibility of padded prices. Certain agreements confer the right upon the foreign collaborators to make purchases from abroad without obtaining the consent of Indian collaborators. Another restriction is the foreign collaborators' control over production. The task is completed by appointing chief production engineers, plan engineers and others who assume complete management. Other clauses restrict the Indian ventures to diversify or expand the product line. Another restriction concerns control over sales, local and overseas. In some cases, the foreign collaborators compel Indian counterparts to sell output at a certain rate of commission

to collaborators' subsidiary in India. This unduly interferes with the profit motives of Indian ventures. Still other restrictions hamper the freedom to export of Indian ventures. The clauses limit the right to export to some or all countries or right to export at collaborators' will. All such restrictions suit the foreign collaborator but unduly restrict our export effort. Another restriction is the right of foreign collaborators to become the export sales agents. In this case India loses sales commission, drive and interest in foreign trade. Some agreements demand high royalty on export sales and this again hampers the export effort since the high royalty increases the production cost and makes the export goods more costly.

The emphasis of foreign collaborations has been on tailor-made (turn key) contracts. This is responsible for retarding the development of Indian technical work. This has also meant a lot of fees to the foreign collaborators. In some cases defective, discarded and obsolete and commercially unsuited technology has been imported into India and the whole investment has been exposed to a great risk. There have been instances of breakdowns of plants, costly additions, modifications, failures and big losses and abrogation of agreements.

In most cases, the foreigners impose their own technology, however unsuited it may be to this country. The tariff commission complained that automobile manufacturers of this country had to conform to the designs and specifications of the overseas manufacturers and get their approval. The same commission found that Indian firms had to adopt the frequent changes in specifications introduced by their foreign associates. In the case of paper

machinery there has been induction of more capital intensive machines with contrasting climatic conditions, dissimilar raw materials, different grades of chemical and requiring highly trained workers than are to be found in India besides several other disadvantages. In case of motor vehicles there has been an imposition of fashion-induced changes utterly unsuitable to Indian conditions. In packing and handling, there has been a displacement of the manual labour.

The technical personnel deputed to India have also been found unsuitable. This was also due to the shortage of qualified technicians abroad and their unwillingness to serve in India. The foreign technicians awaited directions from abroad in cases of some defects. In some cases, the foreign technicians were less qualified than their India subordinates. There have been instances of non-cooperation from the foreign collaborators leading to infringement of collaboration agreements. The demand for renewals of collaboration agreements shows that the foreigners had imparted inadequate technology in this country. It also shows that the dependence of Indian firms was not of temporary nature but of continuous nature. The collaborating firms ignore the research side. In such concerns, the research is the responsibility of the foreign counterparts and the Indian firms do not feel the incentive for research or improvement. The impact on the Indian technology of this disincentive has been disastrous. Indian industrialists have shown apathy to the indigenous know how, with the result that there has been a waste of Indian talent.

One serious limitation of the private foreign investment is its monopoly posture. There has been product-wise concentration

and country-wise concentration. In 1,053 products, with high level of monopoly concentration, as many as 447 had foreign collaboration. Again out of 94 foreign subsidiary firms as many as 74 were dominant (producing one-third of the total products) monopolistic undertakings. These include chemicals, drugs, pharmaceuticals, cellulose and food. The country-wise concentration concerns bigness of business. Among the top hundred companies (in terms of assets) in 1966, nearly 75 per cent had foreign collaboration. The bigness is a source of great economic power. Due to bigness, these firms control foreign exchange resources, industrial licenses, have control over products and acquire undesirable effects in the national interest. Due to monopoly position, the foreign investment has enjoyed higher profits. In pharmaceuticals, the foreign sole venture subsidiaries earned an average net profit, on net worth, of 40.8 per cent and 31.6 per cent in 1962 and 1964, respectively. The sole ventures earned in two years, a cash profit which equalled their investment. Normally the controlled companies took four years to get back their investment. The foreign firms may also conceal the real level of profits by multiplying various firms. Thus a foreign firm may buy something from its branch abroad and may pay excessive prices to it and thus transfer some profits abroad. At the same time it may show decreased profits at home and escape taxation.

Most of the foreign investments are capital-intensive. This gives an encouragement to competing Indian firms to adopt equally capital-intensive collaborations. The result is a rise in unemployment and low wages for the relatively unskilled workers and rural labour.

The contribution to export sector of collaborated ventures is also rigid, rather declining because of the nature of agreements undertaken, as is clear from the table below:

Table 6

Foreign Exchange Transaction of Foreign Collaboration in Manufacturing Sector

(Rs. crores)

	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67
Value of Production	794.40	901.00	1059.30	1266.60	1500.90	1848.20	2137.0
Value of Foreign Exchange Earning Through Export	68.10	75.50	82.30	93.30	109.60	129.60	144.60
Percentage of Export	8.57	8.37	7.76	7.36	5.93	7.01	6.76

Source: RBI, Foreign Collaboration in Industry: Survey Report, Bombay 1968 (Partial Reproduction)

The role of private foreign capital in generating an internal surplus for relieving the repayment problem is not very impressive. In corporate sector, the private foreign investment accounted for roughly 14 per cent and 18 per cent investment during the second and third plan periods, respectively. If the capital inflows from official sources into private investment are also taken into account, the foreign capital represented 25 per cent and 27 per cent, respectively of the net investment during the second and third plans. In considering this share, the cost of private capital is not to be lost sight of.

Table 7

Share of Foreign Capital in Saving Investment in the Corporate Sector

(Rupees in crores)

Year	Domestic Corporate Savings	Household Corporate Shares and Securities	Net Foreign Capital from Private Source	Net Foreign Capital from Official Source	Total Corporate Investment
1	2	3	4	5	6
1956-57	58.5	84.5	23.8	12.1	178.9
1957-58	18.0	53.7	20.8	32.9	125.4
1958-59	32.4	39.3	2.5	26.2	100.4
1959-60	57.6	52.5	10.2	10.6	130.9
1960-61	106.7	59.3	51.7	- 1.4	216.3
Total	273.2	289.3	109.0	80.4	751.9
	(36.3)	(38.5)	(14.5)	(10.7)	(100.0)
1961-62	111.6	83.7	28.1	16.8	240.2
1962-63	136.0	59.8	29.7	10.7	235.2
1963-64	141.6	45.9	30.7	26.8	245.0
1964-65	92.9	57.3	56.6	30.6	231.4
1965-66	93.3	53.2	81.8	22.6	250.9
Total	574.4	299.9	220.9	107.4	1202.7
	(47.8)	(24.9)	(18.4)	(8.9)	(100.0)

Figures in brackets are percentages to total.

Source: RBI, Report on Currency and Finance, 1968-69 (Partial Reproduction)

As regards the tendency to generate the external surplus, X over M, the effect has to be isolated at two stages. Firstly one can take up the immediate effect of increasing X over M and

then the overall effect of increasing X over M. In the immediate effect one can further isolate the tendency to increase the free foreign exchange to ease the severity of the repayment problem.

As regards the immediate effect, we find that the contribution to the balance of payments is negative as is clear from the table 8 given in the Appendix.

When we look at the tendency for cash inflows (the constituent that actually helps in repayment) we find it has been really small. The nature of collaboration agreements in the recent past restrict this component still further because the recent agreements have been for training, for the use of patents and trade mark of collaborators, for loans to finance capital outlays in which collaborators supply plant and machinery. The American companies are expected to meet a part of their requirements from PL 480 funds. All these factors inhibit the inflow of cash for easing the repayment problem.

Whatever the importance of private foreign capital in easing the repayment burden by the indirect path of growth, its role by the direct path of encouraging cash inflows appears to be limited, severely at least in the context of present policies. Whatever little scope exists, its utility can be increased by following suitable policy measures.

The emphasis should be on the assimilation of foreign technology and less on mere import of turn-key projects. There is a need for encouraging participation of this capital through cash inflows. In case of kind investment the emphasis must be on global tenders. Progressive indianisation of staff, lessening the dominance of foreign monopoly capital, check on indiscriminate multiple

collaborations, check on spilling into low priority channels, disallowing all such functions as can be performed by the local talent, careful examination of duration, rate and basis for computation of royalty, securing flexibility in adopting the capital to local requirements, check on import of backward, capital-intensive techniques, greater taxation of private enterprise to equalise their private marginal net product with the social marginal net product in cases where the return to foreign/foreign collaborated capital is high are some other useful hints for increasing productivity to this country and its greater amenability for the repayment problem.

APPENDIX

Table 8

Immediate Contribution of Private Foreign Investment to Balance of Payments

(Rupees in crores)

	1956-57	1957-58	1958-59	1959-60	1960-61	Total	1961-62	1962-63	1963-64	1964-65	1965-66	Total
A. Gross inflow from private sources on capital account excluding loan	31.2	26.9	26.8	26.8	62.4	173.1	35.6	38.7	31.4	27.1	45.6	178.4
B. Outflow to private source abroad on capital account excluding loan	6.3	9.0	24.4	14.8	9.1	63.6	7.5	9.0	0.7	-	0.6	17.8
C. Net inflow on Capital account	24.9	17.9	24.0	11.0	53.3	109.3	28.1	29.7	30.7	27.1	45.0	160.6
D. Investment Income out payments. Profits and Dividends only due to foreign capital on current account	18.8	23.2	26.0	28.7	32.2	127.9	35.0	30.2	29.0	36.1	32.5	162.8
E. Out payments due to technology transfer for royalty and technical fees	6.7	5.6	5.7	7.6	11.7	37.3	12.0	16.6	16.1	20.4	9.0	74.1
F. Total current out payments due to private foreign investment	25.5	28.8	30.7	36.3	43.9	165.2	47.0	46.8	45.1	56.5	41.5	236.9
G. Direct Net Contribution to Balance of Payments by Foreign Investment (C-F)	- 0.6	-10.9	- 28.3	- 25.3	9.4	- 55.7	-18.9	-17.1	.14.4	-29.4	3.5	-76.3

Source: A, B and C from R.B.I. Surveys, D to E for years 1956-57 to 1960-61 from RBI India's Balance of Payments 1948-49 to 1961-62 and remaining from statement of Union Minister of State for Finance on April 7, 1966.

Chapter XI

EXPORT PROMOTION

(The Chapter on Exports Projection was concerned with projecting, more or less on the basis of existing commodities and known elasticities. This chapter is mainly concerned with evolving a different pattern of production and suggesting a different policy framework to boost exports. The chapter deals with the difficulties being experienced by the LDCs with respect to unstable earnings from primary goods, the problems associated with the export of manufactures from LDCs and the measures being adopted by LDCs/DCs/World Organisations to secure greater stability and higher earnings from exports. The measures related to securing higher earnings for India's exports are spelt out next.)

The exports from the LDCs suffer from a number of disabilities. Most of the LDCs specialise in the export of 'a few' primary commodities. A. Maizel's studies for 1960-61 show that this specialisation was for one, two or three main primary commodities for 100 separate LDCs (see Table 1 in the Appendix).

The situation has changed since then but even now the base for exports of LDCs continues to remain narrow. The disadvantage of a narrow base is low exports, and of a narrow base with primary commodities is the "elasticity pessimism", in addition.

Another disability is the fluctuations in exports values and earnings (see Table 2 in the Appendix). These fluctuations are the result of a number of factors on both the demand and the supply sides of primary commodity markets.

Demand changes are due to consumption changes which, in turn, are due to changes in business activity (in case of raw materials and intermediate products) and because of changes in disposable real income per head (in case of food, beverages and tobacco). Again cycles of different commodities grow out of phase with general business cycle and this gives rise to demand changes.

Changes in supply are due to seasonal variations, random and special factors like strikes, variation in weather conditions, political crises and cyclical movements as in case of tree crops like coffee, tea, cocoa and rubber.

Along with this there are tendencies of sagging demand for primary products of the LDCs. The principal developments in synthetics are accomplishing this task. The growth of consumption of synthetic materials per head is given below:

	(US level in 1952-54 = 100)	
	1952-54	1960-61
USA	100	161
UK	46	107
EEC	29	80
Other West Europe	10	37
Japan	21	91

Source: A. Maizels with Campbell-Boross and PBW Reyment, "Trade and Development Problems of the Underdeveloped Countries", National Institute of Economic Review, No. 28, May 1964, pp. 24-48.

Man-made fibres are replacing cotton and wool; synthetic rubber replacing natural rubber and plastic materials replacing non-ferrous metals, rubber, steel, timber, leather and jute, etc.

The growth of natural products in DCs also replaces the primary products of the LDCs, like beet sugar replacing cane sugar. In technology trends towards a lower quantum of material consumption per unit of output by increasing use of former waste materials or by making lighter products (light-weight clothing, lighter machines) decrease the demand for raw material from LDCs.

The pattern of industrial production in DCs away from textiles, clothing and non-durable industries (which are more material consuming) to (more profitable) durables and chemicals (which are less material consuming) also reduces the demand for exports from LDCs.

Then there are tariffs by advanced countries. According to an UNCTAD (second) survey, 32 per cent of the commodities from the LDCs are facing trade barriers from DCs. There are also non-tariff restrictions, trade agreements of importing countries and preferential treatment of some territories. These stand in the way of exports from some LDCs.

A number of formal inter-governmental commodity agreements involving the regulation of supplies and/or prices have been in force during the post-war period. Less formal arrangements for market regulations, outside the context of international commodity agreements have also been evolved for a number of commodities.

Export quotas which aim at stabilizing the price of a commodity by regulating the quantity entering the world market

from the producing countries have been in force for coffee, sugar and tin. In case of coffee, the enforcement of provisions was difficult because of surplus supplies. Export quotas run into difficulties if these do not cover a sufficiently high proportion of world trade, if there is the absence of effective cooperation of exporters and importers, and if these lack quick adjustments due to changing demand and supply.

The use of buffer stocks introduces a stabilising element into the working of a commodity market. The buffer stocks aim at selling when the price is high, thus increasing supplies in time of scarcity and buying when the price is low. The applicability of buffer stocks is limited to commodities which have distinct physical characteristics, relatively small cost of storing and recognised grades.

The multilateral commodity contracts also moderate excessive fluctuations in export earnings of producing member countries. Under this type of agreement, exporting member countries supply given quantities to the importing member countries at the ceiling price level, if the world price rises above that level. The importing member countries purchase given quantities at the floor level if prices fall below that level. The technique sets a limit to the fluctuations in prices.

Short term forecasts of supplies and action taken by producing countries to adjust the output also act as a stabilizer. The arrangement relates to jute, kenaf and allied fibres under the auspices of FAO Study Group 1965.

The disposal of excessive surpluses for non-traditional uses is another technique of market support. Under such schemes,

excess cocoa, for example, is used for manufacturing margraine or other non-traditional items.

Other measures have been to stabilize export earnings by compensatory or supplementary income transfers. During recent years there have been several types of compensatory schemes in the world. One scheme is based on the extension of short-term credit through IMF. A second scheme is based on an insurance element, and a third involves supplementary financing to offset shortfalls in exports of developing countries within the framework of their developing schemes.

Measures designed to meet the challenge of synthetics are aimed at improving the comparative position of the commodities exported by developing countries. The improvement in technical characteristics, developing new uses, and unit cost reducing are the techniques in many cases. Fundamental research into chemical structure of wool and natural rubber has been going on. In textiles, researches have led to the development of combinations of natural and synthetic materials. Malaysia has introduced a standard grade natural rubber to compete successfully with the synthetic one. The main avenue for cost reduction is through improving physical productivity in the developing countries through increased inputs of fertilizers, machinery, insecticides, better labour utilisation, use of high yielding varieties and better production methods, etc. Newer (more) uses relate to finding out more eligible combinations of natural and synthetic material which are more biased towards the natural product. For example, a terene-cotton variety can be in the ratio of 80:20 but more eligible variety for primary products may be developed with a ratio of 50:50. The latter will be more beneficial to

the primary commodities producing countries.

The long term problems in increasing exports from the LDCs fall into three groups. The first is to raise the demand by promotional methods. The second seeks access to the markets of developing countries. The third relates to measures to control the growth of production of commodities that are in persistent surplus supply on the world markets and to promote diversification programmes. Measures to raise the demand are concerned with measures to influence consumers' preference./ The formation of World Coffee Promotion Committee and International Wool Secretariat are steps in the direction of raising demand by various methods. The tariffs have been used by DCs to perform a revenue function and for protecting domestic production. In 1962 alone, custom duties on primary products alone yielded $ .8 to .9 billion. The protection of domestic production (say in agriculture) may be to ensure certain levels of agriculture outputs. Measures designed to control the production of commodities which are persistently surplus will not succeed if these apply to efficient countries, are unsupported by accurate projections of demand and supply or are unaccompanied by measures to divert factors of productions into alternative lines without much cost. Programmes of diversification may take the shape of broadening the pattern of production, processing primary commodities and developing labour-intensive manufacturing commodities. All these activities mean the delinking of the exports with the fortunes of any single commodity.

Another line of export promotion is intra-trade of developing countries. UNCTAD I addressed itself to the lowering of trade

barriers, the strengthening of trade and monetary relations, and improvement in methods of payment and export promotion of LDCs. The volume of trade, however, among developing countries represents only a small proportion of their total foreign trade. In 1965 it was 1/6 for total merchandise and less than 1/7 for primary commodities.[1] Many efforts have been made by LDCs to expand the scope of their trade with one another. There have been bilateral trade agreements and proposals for regional trade preference arrangements, including, full customs unions. The bilateral trade agreements are in hundreds over the post-war period. While the potential scope for extending the mutual trade of developing countries in primary commodities is substantial, a number of factors make the progress difficult in the near future.

Firstly, the acute shortage of foreign exchange affects intra trade adversely. One result is that capital and intermediate products have a high priority and therefore primary products have a low priority in the import plans of developing countries. Secondly, supplies of some primary commodities like wheat, oils, fats, raw cotton and rice produced in DCs and supplied to LDCs on concessional terms restrict the trade among LDCs. Thirdly, the pattern of economic growth in the LDCs places more emphasis on manufactured goods than on industrial raw materials, e.g., a country producing cotton would like to have its own cotton textile industries and would be reluctant to export cotton.

Developing exports to socialist countries has a further scope for LDCs exports. Trade with socialist countries is still

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1. UNCTAD II, New Delhi, Vol. II, p. 51.

low, a little over one tenth against 6 per cent in 1960. The growth of personal[2] consumption of certain commodities is below the levels of developed countries and an increase in these may necessitate exports from other countries including LDCs.

Per Capita Consumption of Selected Tropical Products in Eastern and Western Europe in 1966

(In Kgs)

	USSR	Other Socialist Countries of Eastern Europe	Western Europe
Cocoa	.26	.57	1.46
Coffee	.15	.72	3.07
Tea	.31	.10	.79
Bananas	.10	.20 (b)	9.1
Vegetable Oils	6.4	5.9	11.8

(b) excluding Albania and Eastern Germany

Source: FAO Agriculture Commodities Projections for 1975 and 1985
FAO Commodity Review 1967; Trade Year Book 1966.
Quoted by UNCTAD II, Vol. II, p. 52.

There is a growing demand for raw materials and fuels due to the growth of industrial production in the socialist countries. The LDCs are likely to receive some attention in this case. Cost benefit analysis in economic and management reforms going on in socialist countries may necessitate domestic production or imports. In so far as it emphasises the latter it may also give an opportunity to the LDCs to push up their exports.

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2. Ibid.

The manufactures and semi-manufactures from LDCs have their own set of difficulties. According to a UN survey, in the period 1955-65, world trade in manufactures and semi-manufactures grew twice as fast as that in primary commodities, trade in primary commodities grew at an average annual rate of 4.8 per cent; and that in manufactures and semi-manufactures grew at 9.2 per cent. The DCs exported 82.1 per cent of the world exports, the share of LDCs declined from 6.5 per cent to 5 per cent during 1955-58. The exports from LDCs were confined to a small number of countries like Hong-Kong, Taiwan, Yugoslavia, Israel, a number of Latin American countries and the Republic of Korea, mostly.

The manufactures and semi-manufactures do not have the same defects as the primary goods have, i.e., fluctuating prices, low elasticities and sagging demand.

If the LDCs are allowed to export manufactures and semi-manufactures to DCs the step will not necessarily inflict any injury on DCs. The LDCs do not, in fact they cannot, hold foreign exchange. They will spend the foreign exchange earned by the export of manufactures and semi-manufactures on goods from the DCs. The demand for goods from DCs will be maintained in this case.

The export of manufactures and semi-manufactures from the LDCs will also facilitate more rational allocation of resources. If the LDCs can export these goods these will not be pressed by tight foreign exchange situations and will not seek solutions in undesirable or costly forms of inward-looking industrialisation to which most of these are not suited. The step will mean an efficient and rational allocation of resources.

The pattern of tariffs, as it exists, rising with the degree of processing, inhibits the location of industry at the site of raw material. The reduction of tariff restrictions will remove this disability and again result in efficient and rational allocation.

There are several difficulties in the granting of access to manufactures and semi-manufactures to the developed markets. The DCs want to save their own processing industries. Each country has some items which it regards sensitive. Even in the Kennedy Round, all major developed countries submitted a list of such items. In case a considerable agricultural output is going into these industries, the fear of a less than fair deal for agriculture can be another difficulty. Allied with these are the fears of unemployment in both of these sectors. Most of these fears are not genuine because the growing economies of the developed countries have a solution for all these issues.

An ideal programme for increasing access to the markets of DCs is a tariff zero situation. Short of it, gradual tariff reduction on m.f.n. basis, spread over a period of time or tariff quota system based upon consumption, production or imports appears preferable. If all the DCs participate in the programme of improving access it will be advantageous. In the absence of such a participation as many country as can participate will be helpful. The benefit of the system must be extended to all LDCs with special care to foster the exports from the less developed among these. The duration of the system must not be too short as not to promote industrialisation programmes in LDCs nor too long as to incur opposition from DCs. The supervision of an international agency will ensure the better working of the

programme.

Most of the DCs have removed almost all quantitative restrictions in their mutual trade in manufactured and semi-manufactured goods. A number of DCs still maintain quantitative restrictions on a number of export items from LDCs. The removal of these non-tariff restriction will help increase the access to DCs markets.

In 1965, some 12 to 15 per cent of the imports were under quantitative restrictions. These were mainly textile clothing and processed agricultural products (processed vegetables, fruits, meat products, cereals, beverages and spirits). These also covered jute, woollen, hard fibres and coir products.

The detailed information on the type of restrictions is not available. However, Japan and UK apply global quotas; Federal Republic of Germany, global and bilateral quotas; Denmark and Italy, global quotas and discretionary licences; Norway, discretionary licences and state trading monopolies, France acts on the basis of whether a country was a member of the Organisation for European Economic Cooperation or a party to GATT and Germany on the basis of former colonies and so on.

Programmes for import liberalisation, in this regard, include the adoption of standstill which was agreed upon, without dissent, by all DCs; preparing an inventory of existing quantitative restrictions and the reasons for their maintenance and their economic implications; liberal administration of quotas, especially their less arbitrary use in case of discretionary quotas; elimination of unutilised global quotas and freeing imports in their cases and a gradual increase in global quotas with a view

to achieving full liberalisation at the end of a certain period.

It has to be grasped that the provision of the access to the markets of DCs or removal of non-tariff restrictions, will not be of much avail if unaccompanied by desire of LDCs to size up to the problem.

Now we shall discuss some aspects of the directions for our exports. The word directions has not been used in the sense of destinations for our trade but in the sense of some orientation to push up our exports.

In official circles there is a sense of complacency, if not jubilation, at India's exports performance because the total export earnings every year have been increasing. It is, however, difficult to agree with such a sense of jubilation. More rigorous indicators of a country's export performance are the percentage of its exports to its National Product and secondly the percentage of its exports to world exports. In India, we find that our exports fell from 7.5 per cent of the Indian National Product in 1960-61 to as low as 4.3 per cent in 1967-68. In relation to world exports, Indian exports fluctuated downward from 1.2 per cent in 1960-61 to .8 per cent in 1967-68 and .6 per cent in 1973. Indian exports were 2.5 per cent of the world exports in 1947-48. Indian performance is not even comparable to Hong Kong with .03 per cent of its area and .75 per cent of the population.

The pattern of India's trade is still dominated by traditional items. Not all primary agricultural products are essentially bad earners of exchange. There is a need for

continuing the production and exports of agricultural commodities which constitute specialities for foreigners and where the production of foreign countries is low. Superior quality rice, pulses, fruit, flowers and vegetables belong to this category. In case of rice, the export of Basmati, and in case of bananas, production of suitable varieties such as Locatan, Valery and Giant Cavendish and in mangoes, some superior varieties must be encouraged.

Fortunately, due to scientific and technological advance, the line between the traditional and non-traditional exports can be made to wear thin now. Within the traditional group itself (as if silver linings in dark clouds) there are possibilities of and switches to non-traditional items.

Jute is traditional but jute carpets are not. Textiles are traditional but ready made clothes are not. Tea is traditional but 'liquid tea' is not. As against the traditional coffee some brands of instant coffee are non traditional. Sugar is traditional but sugar cubes and confectionery are not. Wheat and Milk are traditional but biscuits are not. Skins and Hides are traditional but leather products like sophisticated bags, purses, footwear and suitcases are not. It is necessary to explore such possibilities of transition to avoid dependence on highly fluctuating primary commodities.

Another direction is increasing the exports of labour-intensive products. It is not necessary that comparative advantage be less or disadvantage more in all lines in which the labour is the chief input. The following spheres need investigation as far as labour-intensive exports are concerned:

Handicrafts, handlooms, textiles, readymade garments, woollen and knitted wear, glassware, brassware, toys, antiques, transistors, radios, and transistor components, railway wagons, ornaments, artistic goods and spares made by small industry.

Also the shift to engineering and chemical products will be a helpful shift. In the post-war years an increase of 1 per cent of Gross Domestic Product of DCs raised the demand for imports of foodstuffs and agricultural raw material from LDCs by .5 per cent to .6 per cent, for fuels by 2.4 per cent and for manufactures by 1.9 per cent. The orientation of production and trade can be extremely helpful along these lines. It is difficult for most of the industrial products to hold their own in face of competition from highly sophisticated products from advanced countries, still there are bright chances for some of the products mentioned below: Pig Iron, steel bars, and rods, steel structurals, billets, plates, sheets, skelp, strips. There is also a scope for grey iron castings, cast iron spun pipes, malleable iron castings, forgings, fabricated steel structurals, tubes, steel pipes, steel wires, railway track fasteners, railway rolling stock, semis and extrusions of commercial grade aluminium, ingot aluminium, internal combustion engines, pumps and compressors machine tools, hand tools, dies, jigs and fixtures, textile machinery, automobile ancillaries, bicycles, sewing machines, precision products like fuel injection equipment, special purpose machines, semi conductors, components of computors, calculating machines, transistors, telecommunication equipment.

Among the chemicals, resins, PVC, polythene; among petrochemical products, plastics, drugs and pharmaceuticals; and among

inorganic chemicals, caustic soda, bleaching powder, calcium carbide and alum have a good scope. The export of salt, pulp, paper products, rubber tyres and tubes and rubber goods, bones, methanol, acetone, chlorinated hydrocarbons, and many others have a very good scope. Special problems afflicting the engineering and chemical group are the shortage of raw material, delay in disposing of drawback claims and cash assistance applications, high freight rates, delay in granting import licences, competition from foreign units with large scale production, lack of fixation of drawback rates for new products. There is also a need for attending to import licensing, allocation of foreign exchange, ensuring price discipline, supply of inputs, determining location of industries from the economic and export angles and reducing the transport costs.

A lot remains to be done so far as the supply of quality goods is concerned. With a gratifying quality, it is possible to sell a good even at a high price in a competitive market. Countries like Britain and Germany have built their image in the sale of quality goods. Japan has earned a great name and its goods are highly popular in the world markets. The Indian Standards Institute and Ag Marks can do a lot of work in this direction. The Export Quality Control and Inspection Act 1963 vesting the Government with suitable powers and the creation of Export Inspection Council of India fill big gaps but only 85 per cent of India's exports are covered under the quality and/or pre-shipment inspection. There is a need for enforcing the quality regulations rigorously because there have been instances of discovering defective and sub-standard articles even after

the inspection. The test houses can also be helpful in checking the quality of capital, engineering and some consumer products and there is a need for increasing the number of such houses and allowing collaboration of international test houses with ours.

Similarly there is an urgent need for looking into the packing and packaging problem which was not serious when we were exporting ores, crude articles and some primary commodities. It has acquired a new aspect with the development of sophisticated articles. The sale, colour, languages of the containers, cost of the packages, conservation of space and design cannot be left to individual producers. There is need for constant research and help by Indian Institute of Packaging on these aspects and on increasing the indigenous contents of packing. Attention is needed for strapping machines, automatic inside locks, seals and sealing devices, patented cases and collapsible clips.

The likely developments in the world economy have to be taken into account as far as our exports are concerned.[1] The group consisting of North America, Western Europe, Australia and Japan which claims 3/5 of India's exports is fast expanding in real income and has great potentialities. The stabilisation of international currency and gradual reduction of industrial tariffs as a result of Kennedy Round of tariff negotiations in 1967 and low heights of remaining tariffs, offer another scope. The newer demographic trends in Japan which imply a reduced labour supply and a shift away from labour-intensive industries

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1. This part is based upon Prof. M. Singh's thought provoking article, "Emerging Markets, the International Scene", in F.T.R., January 1971.

have brightened the scope for India with vast reservoirs of more or less inexpensive labour. Another category is India's trade with socialistic countries. As stated earlier, in this chapter, there is a great scope for increasing the trade with this group. The economic planning programmes, followed by socialistic countries may necessitate comparative cost advantage in importing goods from India. Prof. Singh has cautioned against the craze for concentrating on hard to sell articles because these might act as repellents. Much, however, will depend upon the emerging pattern of demand by these countries as a consequence of their economic planning, which must be under close watch. India's trade with developing countries accounts for 20 per cent. Their commitment to higher rates of growth (than the realised rate of 3 per cent during the last decade and a half) is another sphere to be exploited despite its vast economic and political problems. The lending activities of World Bank Group offer yet another opportunity for increasing electrical, transport and other infrastructure projects exports.

It is also necessary to be vigilant, for giving direction to the events, if we mean business in the international market. Indifference, nil action or being at the mercy of circumstances have never been substitutes, much less good substitutes, for conscious direction and planning. Yet the Indian export sector has been a victim of insufficient direction until the later part of the Third Five Year Plan. The export stagnation, according to certain studies[2] is as much the result of less

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2. Manmohan Singh, India's Export Trends and Prospects for Self-sustained Growth, Clarendon Press, Oxford, 1964; Bhagwati and Desai, India, Planning for Industrialisation, Oxford University Press, Bombay, 1970.

demand conditions as it is due to the domestic policies of the Government of India. Bhagwati and Desai have come to the conclusion: "India evidently failed to make the best use of whatever trade possibilities were available".[3] The general factors dampening India's share have been policy measures like export controls starting from the second World War, in case of jute manufactures, tea, cotton, textiles, vegetable oilseeds and oils, raw cotton, raw wool, coffee, manganese ore and hides and skins. Export duties on a number of commodities affected the export of these. Increasing attention to the domestic demand like Coffee Board encouraging the domestic consumption of coffee through promotional campaigns. The policy of Government to keep the export duty on tea higher than excise duty for a decade is another instance. The deliberate policy of keeping exchange rate overvalued, discouraged exports and diverted production for the domestic market because in the domestic market prices always increased with increasing costs and industrialists supplying home market always made more than normal profits. With regard to specific export commodities, India lost a considerable jute market to Pakistan, which "steadily increased exports of Jute Manufactures from 90.4 to 190.7 thousand metric tonnes between 1957-1960 ... due to passive acquiesence in Pakistan's emergence as a major supplier". In tea, the falling share of Indian exports occurred because "(1) The Indian Government did not spend anything remotely comparable with what Ceylon spent";[5] and (2) "because no

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3. Ibid.

4. Manmohan Singh, op. cit.

5. Ibid.

attention was paid to improving quality or reducing costs of levies".[6] In the case of cotton textiles "Japan doubled her relative share & India failed to seize this opportunity".[7] In case of vegetable oil and oilseeds, "the policies sacrificed export markets to feed domestic consumption",[8] also the protection of village Ghanies' led to inefficiency and higher cost and less exports. In tobacco, despite many possibilities "there is no evidence at bolstering exports".[9] In coffee, the official Coffee Board took pains to encourage coffee habit in India than promoting export growth. The sale practice adopted by Coffee Board also made it 'an uncertain commodity in the eyes of the foreign customers'[10]. Indian policies of 'levying export duties of 29% of fob value of exports between 1956-57 to 1959-60 on Mangenese ore enabled emerging USSR & Brazil to capture her share. At the same time, the policy of occasional transfer of quotas of Manganese Ore, raised their marginal costs'.[11] In leather, "lack of attention to quality and relative price factor decreased India's share drastically".[12] All these instances underline one important lesson of vigilance for future policy by our planners.

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6. Ibid.
7. Ibid.
8. Ibid.
9. Ibid.
10. Ibid.
11. Ibid.
12. Ibid.

Other measures relate to export credit and finance, export assistance, marketing, transport and shipping problems and problems relating to Rupee Trade. Most of the difficulties of India, in these spheres, are those of a new entrant in the foreign trade. The infra-structure in many of these lines has not been built up and wherever built it is inadequate or has not taken roots. Some suggestions, for each of these measures, are indicated below.

Credit is very important for foreign trade and of the two types of credit -- pre-shipment and post-shipment, the latter has been assuming more importance because of increase of durable and capital goods in India's export and needs more attention. The rate of interest on export credit is quite low in other countries. In India, the margin granted on the interest rates is quite high even then the absolute rate of interest is quite high.

There is a need for comparable rates of interest for this country vis-a-vis those of other countries.

The risks of export finance -- political and commercial -- are adequately covered in many advanced countries. There is thus less hesitation in selling on credit. In India, the Export Credit and Guarantee Corporation of India gives a cover of 80 per cent on engineering goods with Rs. 2 crores contracts. The risk is 90 per cent for small exporters. There is a scope for extension of risk cover and for covering exchange rate risk as far as India is concerned. There is also a need for raising the resources of the above corporation to meet the unforeseen circumstances of exceptional nature which it has not met so far.

Various measures of exports assistance -- fiscal financial, special and general incentives -- have been in force in this country. The important fiscal incentives have been income tax concessions, drawback facilities of 98 per cent of duty paid on imported article when it is re-exported as such and drawback of the whole of duty paid on imported articles used up in export articles, refund of central excise duties on indigenous material used in export and sales tax exemption. The scheme is restrictive and time consuming and inadequate in compensating against price rises. Several other charges like octroi, sales and other cesses are not compensated. Some relief is needed on these charges too.

The financial incentives comprise cash assistance, assistance for export promotional efforts and export credit facilities. Cash assistance also helps to neutralise higher production costs and import duty on raw materials. The Market Development Fund scheme gives an assistance of 50-100 per cent of the total cost according to the nature of export promotional activity. The MDF is small to act as a financial stimulant. There are also procedural delays and complaints of arbitrariness in the disposal of cases.

Special incentive schemes work through Import Entitlements, started in 1957, to enable the exporters to procure raw materials and components to diversify his exports. The recent Import Replenishment Scheme is the re-introduction of the former Import Entitlement Scheme, discontinued during devaluation. Scarce indigenous commodities are also allocated to the manufacturers of specific export goods.

Other special incentive schemes are tax credit certificates meant to help new industries in adjusting or claiming refunds under Income Tax Act. The scheme worked before devaluation.

Other export promotional measures relate to railway concessions, relaxation of control over exports, placing several articles under OGL, facilities for payment of fees to marketing consultants. The licences have created the problem of high profits, corruption and social injustice.

The best types of solutions are export assistance in the form of raw materials supply at international prices and the refund of taxes to enable the producers to compete, on an equal footing, in the international market. Cash assistance has the disadvantage of getting known to the importer and also leaking out depending upon the elasticity of demand and supply of exports.

The knowledge of overseas sales is necessary if we mean a considerable degree of market penetration. The marketing of traditional goods like tea, jute, cotton, and ores was handled by brokers and foreign firms and there was no in-built pressure for marketing. The pattern of trade of India is now considerably diversified and the problem has assumed a great importance. The foreign markets pose various challenges -- of identification, information, intelligence and statistics, publicity, distribution and the problem of updating information.

Identification of markets and then deciding the commodities to be produced, their specifications and designs, etc. are among the first requirements of marketing. In India, this aspect has received very little attention. The Export Promotion Councils and IIFT have yet to do a lot of work and their resources are

limited.

The Trade Associations, Commercial Banks, trade representatives and some Government departments in different countries undertake the work of supplying information regarding trade matters. In India, facilities regarding these are also inadequate.

The work of conducting market surveys, exhibitions, propaganda and publicity, sending delegations abroad is entrusted to Export Promotion Councils, whose performance is again small because of paucity of funds. The liaison between industry and EPCs has to be increased. Trained personnel in the fields of surveys, advertising, organising trade fairs, show rooms exhibitions constitute an infra-structure for trade expansion. India has yet to make a stride in this direction.

Great gain can be expected by paying more attention to Export Houses. Japan has got a great advantage in organising such houses. In India we may encourage genuine export houses, rather than those with the intention of netting assistance from the Government.

Indian export houses are small and have a small handling of business and need careful fostering. These export houses may also be provided with facilities of foreign exchange for opening new branches abroad. The small industrialists stand to benefit a lot from the work of these houses. Small producers may also be encouraged to pool their resources for marketing sales research for publicity. The method reduces undue competition among them and enables them to have economies of scale.

The growth of rupee trade with socialist countries is comparatively a new channel. It has the advantages of

diversification, self-liquidation and acquisition of new marketing experience. Other advantages are overcoming the shortage of foreign exchange for obtaining capital goods and raw materials for development, economies of scale, encouragement to the export of non-traditional items. Rupee trade can also be made to overcome the constraints like elasticity pessimism, competition from substitutes, some illogical preferences of DCs for some territories and consumers' preferences.

The criticism of the Rupee Trade has been payment of higher import prices, the less essential nature of imports and instances of diversion of our normal exports affecting our net exports, lower unit prices from the socialist countries and possibilities of switch trade. There is a need for some caution. There is also a need for planning exports in consonance with the developments taking place in socialist countries and their requirements which can be met from India. The trade may also take into consideration the requirements due to changing growth pattern of India. There is a need for keeping global competitive prices into consideration while deciding the deals with the socialist countries. Care may also be taken to orient trade with Rupee Trade region and free economy countries in such a way as to maximise the net trade. In case of very long term agreements there should be a provision for considering refixation of prices so that India is not a loser.

An efficient and low cost transport system increases the comparative advantage. In India shipping deserves a very high priority because the percentage of India's overseas trade in her vessels is low, being 13 per cent in 1966-67. The total

tonnage in 1966 was one per cent of world tonnage. The primary commodities also suffer from the disadvantage of greater bulk and higher freight charges. Then there is the inadequate berthing capacity, lack of necessary equipment, little progress in modernisation of cargo handling, congestion in docks and sheds resulting from clearance of cargo not keeping pace with unloading of ships, inadequate capacity for several ports, inadequate water supply, lack of adequate dredging, etc. The economics of mechanisation of ports has to be gone into. The companies manufacturing ships have to be helped in suitable measures for the development of the shipbuilding industry in this country.

One more direction is to seize the opportunities presented by the Generalised System of Preferences. One of the reasons for the low exports of manufactures from the LDCs is that average tariff for manufactures and semi manufactures from these countries is about 50 per cent higher than the average tariff applied to their imports from all sources.

Since 1947, there have been various rounds of tariff negotiations under GATT. According to the Kennedy Round there was a reduction of tariffs by 36 per cent on industrial products. Recently there has been a generalised system of preferences based on the non-discriminatory and non-reciprocal preferences for exports of LDCs. The lead has been given by Australia and it is in the form of unilateral tariff concession. It is proposed to be followed by a number of countries -- EEC countries, Japan, USA, UK, Canada, Ireland, New Zealand, Norway, Sweden, Denmark, Finland, Austria and Switzerland -- which are seeking necessary legislation for implementing the programme.

The GSP is initially for ten years and in case of material injury this may be waived wholly or partly.

The GSP covers practically all industrial semi-manufactures and manufactures. Some sensitive items mentioned in the negative lists have been omitted. USA omits textiles, footwear and petroleum. EEC excludes some primary and processed farm products and products covered under the European coal and steel community agreements. Canada excludes footwear.

EEC, UK, USA, Japan envisage duty free imports except in selected products where a 50 per cent tax reduction due to post-Kennedy Round has been proposed to be applied. Canada proposes 33.3 per cent cut on post-Kennedy Round or (b) the British Preferential Tariff of Canada, whichever is lower. New Zealand envisages variable preferential duties while Ireland does not provide any tariff concession on some agricultural products.

Certain ceilings on imports have also been suggested. EEC will give special attention to sensitive products and have different ceilings for more competitive areas but generally 1968 c.i.f. import value will form the basic quota and 5 per cent of c.i.f. import value from third countries will form the supplementary quota. In case of Japan imports in a reference year plus 10 per cent imports from sources other than beneficiaries will constitute the ceiling. In case of Australia, the level of imports during a reference period plus 25 per cent will constitute the ceiling.

Higher costs and higher prices have been other factors inhibiting India's export trade. Here we pass on from elasticity

pessimism to loss of markets due to higher Indian prices as compared to those of her competitors. The popular remedy suggested here is the monetary measures, which reduce the quantity of money and control inflation. The general lowering of price level by decreasing the quantity of money credit which many methods seek may not be useful, because it may not bring down the prices of export goods. What is more important is an analysis of the nature of higher costs associated with a certain group and then suggesting a suitable remedy. In Engineering, chemical and allied products, the high costs are due to high fixed charges; remedy here lies in increasing production to lower the same. In agriculture and agro-based industries like jute, tea/cashew nuts, the higher costs of raw material may be there because of high incentive prices or fixed prices enforced for production. The ultimate remedy lies here in increasing production. In wage-dominated industries like plantation, the remedy lies in seeing that wage boosts do not exceed productivity increases. Higher costs of export of ores, phosphates are due to transport and shipping charges. While export of some commodities may be reduced by sales taxes and other cesses; in their cases suitable remedies will lie in looking into these charges.

Certain tendencies regarding the export maximisation need to be curbed. For a country bending its energies on "Export or Perish", and compelling each industry to earn its own imports by effecting suitable exports and imposing contractual obligations on firms to export, e.g., PVC powder from Kotah, has the disadvantage of leading to inefficient and throw away exports. The same is the result of the tendency to

force exports for qualifying for import replenishments licences. All these are not good indices of efficient performance. Improving competitiveness, as early as possible, discovering and concentrating on items of high income elasticities and on items of greater comparative advantage or of less comparative disadvantage, will be of true advantage to India in the long run.

Post Script

More recently there has been a big boom in the primary commodities. With a suitable financial assistance to cashew, pepper, jute, tobacco and spices, a big spurt in the export earning can be expected. A great scope appears in the export of the textile and sugar in which we have a raw material base, sufficient manufacturing capacity and enough technical competence if we can utilise idle capacity. The recent spurt in the oil prices has increased the income of oil producing countries many-fold and has caused additional hardship in the form of a higher import bill for this country. At the same time, the higher incomes of oil producing countries offer greater possibilities of export to these countries. So far as imports from India to these countries are only 2-3 per cent of total import of these countries. There are possibilities of increasing export to these countries. There is a great scope of joint collaboration in setting up new ventures and providing consultancy services to these countries. Similarly neighbouring countries, viz., Nepal, Bangladesh, Sri Lanka, Malaysia, Indonesia and Philippines offer an expanding market for the Indian know how, consultancy in hydro-electricity projects, switchgears, power units and

cement plants, etc. All these need immediate attention. The recent discovery of and development of diamond industry from a humble beginning to an export target of Rs. 90 crores recently presents another opportunity. Leather and leather goods and industries totally devoted to exports, e.g. scooters can be other exchange spinners now.

APPENDIX

Table 1

Commodities	No. of countries	Overseas Sterling Area (Group-I)	Other Associated Countries (Group-II)	Latin America (Group-III)	Other Countries (Group IV)
A. One commodity group specialist exporters					
1. Temperate Zone Food	1			Group-III Argentina	
2. Tropical Beverages or Fruit	18	Group-I Ghana, Ceylon, W. Samoa, Zanzibar	Group-II Cameroun, Somalia, Togo, Madagascar	Group-III Brazil, Columbia, Costa Rica, Ecuador, El Salvador, Guatemala, Haiti, Hundras, Panama	Group-IV Ethiopia
3. Sugar	7	Group I - Barbados, Fiji, Mauritius	Group-II Guadeloupe	Group-III Cuba, Dominican Republic	
4. Textile	4	Group-I Pakistan			Group-IV Egypt, Sudan, Syria
5. Rubber	3	Group-I Malaya, Papua			Group-IV Vietnam
6. Ores and Metals	5	Group-I Jamaica, Rhodesia and Nyasaland	Group-II Surinam	Group-III Bolivia, Chile	
7. Petroleum	13	Group-I Aden, Bahrein, Brunei, Kuwait, Libya, Qatar, Sarawak Trinidad and Tobago	Group-II Netherlands, Antilles	Group-III Venezuela	Group-IV Iran, Iraq, Saudi Arabia
8. Manufactures	3	Group-I Hongkong, Sierra Leone			Group-IV Israel
9. Other One commodity group specialists	3	Group-I Burma, Gambia, New Guinea			
Total	57				

Table 1(contd.)

B. Two commodity group specialist exporters		
1. Tropical Beverages or Fruit and Manufactures	3	Group-I India Group-II Angola Group-IV Lebanon
2. Tropical Beverages or Fruit and Oil and Oil Seeds	9	Group-I Nigeria Group-II Dahomey, Guinea, Ivory Coast, Mauritania, Mali, Niger, Senegal, Upper Volta
3. Tropical Beverages or Fruit and Textile Fibres	4	Group-I Kenya, Tanganyika, Uganda Group-III Nicaragua
4. Rubber and Petroleum	1	Group-IV Indonesia
5. Rubber and Rice	2	Group-IV Cambodia, Thailand
6. Temperate Food and Petroleum	1	Group-II Algeria
7. Sugar and Oils, Oil Seeds	1	Group-IV Philippines
8. Other two commodity group specialists	16	Group-I BL. Guiana, Honduras, Cyprus, Jordon, Malta and North Borneo Group-II Chad, Congo(Brazza), Congo (Leop.), Gabon, Mozambique
Total	37	
C. Three commodity group specialists	5	Group-II Morocco, Tunisia Group-III Mexico, Paraguay Group-IV South Korea

Source: A. Maizels with Campbell-Boross and PBW Rayment, "Trade and Development Problems of the Underdeveloped Countries", National Institute Economic Review, No. 28, May 1964, pp. 24-48.

Table 2

Primary Commodities Classified According to the Degree of Instability in World Trade 1953-64

	Instability Indices (a) Unit Value	Value (In $ US Millions)	Exports from developing countries (Annual average)
1	2	3	4
I. Extreme Instability (b)			
Black Pepper	47.3	47.2	60
Tungsten	39.3	-	13
II. Substantial Instability(c)			
Cocoa Beans	19.8	13.7	499
Manganese Ore and Concentrates	18.9	26.7	119
Raw Jute	17.0	7.4	166
Natural Rubber	16.3	17.0	1,342
Hard Fibres	15.7	15.8	138
Lead Metal	14.2	13.6	108
Zinc Ore & Concentrates	14.0	18.4	68
Coconut Oil	13.8	15.9	85
Copper	13.7	13.3	1,068
Zinc Metal	13.6	19.4	58
Jute Goods	12.9	11.2	381
Sugar	12.8	11.3	1,085
Coffee	12.0	7.5	1,941
Copra	12.0	8.2	248
Palm Kernel	10.1	11.6	94
III. Moderate or Slight Instability (d)			
Tin	9.5	19.9	263
Tea	8.5	7.0	597
Rice	8.3	9.0	560
Palm Kernel Oil	7.7	25.8	11
Groundnut Oil	7.5	11.3	96
Maize	7.4	18.3	270
Bauxite	5.6	7.2	114
Palm Oil	5.5	5.5	111
Cotton	5.2	9.0	1,239
Groundnuts	5.1	8.4	229
Tobacco	3.1	4.3	380

(a) Instability as measured by the coef. of variation of residuals from linear trend
(b) Instability indices unit value exceeding 20
(c) Instability indices unit value between 10-20
(d) Instability indices unit value below 10.

Source: UNCTAD II, Vol. II, p. 8.

Chapter XII

SOME REFLECTIONS ON INCREASING DOMESTIC PRODUCTION (Y) OVER DOMESTIC USES (C+I)

This chapter is concerned with identifying some more areas which need more attention and policies which need correction, some immediate, for securing an excess of Y over C+I. The steps for the revitalisation of the economy, for enabling the economy to move from the present state of stagnation and production crisis will go a long way in creating this excess and will also help in narrowing the internal and external gaps for ultimately these gaps correspond to the disequilibria in the process of growth.

We appear to be 'sold', on a number of factors regarding the slow growth of the GNP -- corruption and black money, defective planning, population pressures, illiteracy, lack of capital, faulty policies in agriculture and industry, soft state, ill health and mal-nutrition, faulty and outmoded economic institutions, inequalities, poverty and populism. All these are relevant for a slow growth of GNP. It is also possible that there may be "the failure of the spirit due to which the matter may not be moving".[1] Similarly, the 'failure of politics' due to which economics may not be buoyant may also be a reality. We shall, however, be concerned with economic variables and those also needing immediate policy corrections as suggested earlier and not with some long term measures like changing institutions, overhauling education, creation of economic equality, more

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1. V.K.R.V. Rao, Values and Economic Development: The Indian Challenge, Vikas, Delhi, 1971.

literacy, and a war on poverty. The proper dealing with these long term measures will make this chapter unduly long.

Despite decades of planning, practically all the major problems have shown a remarkable capacity for survival. The present crisis has been with the economy since 1964-65. The rate of growth of national income has been less than the rate of population growth. The national income per capita has been around that in 1964-65. Over the period 1965-66 to 1972-73, the compound rate of growth of commodity production has been at 1.5 per cent and the net domestic product at factor cost has grown at 2.3 per cent. Industry has grown at 3 per cent and agriculture at 1.2 per cent. The low rate of growth of industry and agriculture and high rate of expansion of services has created a gulf between commodity production and services. This along with a high rate of expansion of aggregate demand (11.8 per cent) has resulted in shortage of commodities and a sharp rise in prices.

The consumption of foodgrains which showed an upward trend from 13.94 oz. a day in 1951 to 16.53 oz. in 1961 has declined (leaving the year 1966) during the later years to a level less than jail rations. The consumption of pulses which was 2.43 oz. a day in 1961 was 32 per cent less in 1972. The per capita consumption of edible oils fell from 3.2 kg. in 1960-61 to 2.7 kg. in 1971-72. The consumption of cotton cloth fell from 14.74 metres in 1969 to 13.27 metres in 1972. The number of unemployed on the eve of the First Plan was 3.3 million; by 1971 it had increased to 18.7 million (according to Bhagwati Committee Report). During the census decade, the number of agricultural workers rose at an annual rate of 5.2 per cent to 47.5 million in 1971. The number

of persons below the poverty line of Rs. 20 per capita,per month, at 1960-61 prices has increased from 2/5th late in the sixties to 2/3rd by 1974. The year 1966 is a watershed as far as the industrial production is concerned. The industrial production increased by 9.2 per cent between 1960-66 but declined to an average annual rate of hardly 4.5 per cent in the next six years. There was no growth at all in 1973 and 1974. The rate of growth during the whole of Fourth Five Year Plan was hardly half the projected target rate of eight to ten per cent.

The worst setbacks were experienced in 1973-74. The excessive price rise, severe shortage of essential commodities, grave food situation, hard balance of payments position produced a critical position if not "death rattle in the throat of a dying system"[2] or the "system hitting the rocks".[3]

The measures adopted by the Government have been responsible for reducing production rather than increasing it. The monetary measures restricting credit expansion first in May 1973 by raising the Bank Rate from 6 to 7 per cent, raising cash reserve ratio from 3 to 5 per cent, raising the minimum net liquidity ratio to 39 per cent, raising the minimum lending rates on bank advances to 10 per cent meant a tight money policy. Subsequent steps increased the lending rates of banks to 11 per cent, the minimum liquidity ratio to 32 per cent, limited refinance from Reserve Bank of India. Again in April 1974 and July 1974, the bank rate was raised to 9 per cent. The minimum rate of interest chargeable on bank credit was enhanced

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2. J.D. Sethi, India in Crisis, Vikas Publishing House, New Delhi, 1975.

3. Balraj Mehta, Crisis of Indian Economy, Sterling Publishers Pvt. Ltd., New Delhi, 1973.

to 12.5 per cent and a tax of 7 per cent on gross amount of interest earned by the banks was imposed.

All these measures meant freezing credit and delinking credit with requirements, putting restriction in the way of starting/expanding new ventures. In the absence of any priorities in the distribution of credit, the amount of credit to medium and large industries and wholesale trade was reduced to 36 per cent of total credit creation from 64.2 per cent in 1972-73. In a survey conducted by FICCI,[4] 50 per cent industries reported shortfall in production due to shortage of bank credit and another fifty per cent reported that expansion programme could not go on.

The fiscal measures of the Government especially those dealing with the dividend freeze again had the effect of curbing production. The Ordinance sought to reduce the profits to 12 per cent or one-third of net profits, whichever was less. The loss of income from dividend as compared to that from bank deposits, small savings, debentures has meant diversion of capital away from equities and the companies are not in a position to raise equity capital to the necessary extent.

The price controls, resorted to under Essential Commodities Act, Industries (Development and Regulation) Act, Defence of India Rules and Informal Arrangements with producers have also in many cases the effect of reducing production. Leaving some periods of decontrol, the price control on vanaspati has been for 27 years, on sugar for 32 years, on cement for 18 years, on fertilizers for

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4. FICCI, Towards a Dynamic Economy, New Delhi, 1975.

17 years, on textile machinery for 12 years, commercial vehicles for 11 years, newsprint for 12 years, on petroleum products and tractors for 8 years and 7 years, respectively. The price controls, besides other defects, have diverted new investments from these lines and have hampered production. The duration of controls for such a long time means that supplies have yet not increased to match with the increased demand. Under these circumstances, dual pricing, like that in sugar and textiles, which protects the vulnerable sections but which gives sufficient reward to investors by higher prices from other consumers can be a better method of attracting investment/increasing production in many lines.

The recent measures -- credit squeeze, restraint on expenditure from wages and salaries, compulsory deposit scheme, dividend freeze and reduction in Government expenditure -- have also created some signs of recession in some industries like cotton textiles, synthetic yarn and fabrics, wagons, automobiles, machinery, etc. If the industry cannot carry sufficient stocks, it will be compelled to reduce production. Under these circumstances, it will be good to utilise the saved up money in projects of short gestation. The funds may be used to finance minor and medium irrigation, building of canals and dams for a greater employment level and for increasing production of food. It will be good if saving from non-developmental expenditure is utilised on developmental outlays. What is needed is restructuring expenditure for the greater production than stopping it. The expenditure will also halt the recession in the above industries.

The agricultural sector which produces about a half of national output was allotted less than a fifth of the total plan

outlay in the Fourth Plan and less than a sixth in the second and third Plans. The draft Fifth Plan has 1/5th of expenditure on agriculture and this expenditure is marginally higher than that in the Fourth Plan at 1968-69 prices. The consolidation of holdings out of 114.8 million hectares of sown area are so far 32.6 million hectares. Institutional changes have been neglected for a long time and when enacted, it appears, these were not meant for enforcement. As regards the agrarian reforms the task force on Agrarian Relations under the chairmanship of Land Reforms Commissioner has perhaps said the last word.

"Enactment of progressive measures of land reforms and their efficient implementation call for hard political decisions and effective political support, direction and control. In the context of the socio-economic conditions prevailing in the rural areas of the country, no tangible progress can be expected in the field of land reform in the absence of the requisite political will. The sad truth is that the crucial factor has been wanting. The lack of political will is amply demonstrated by the large gaps between policy and legislation and between law and its implementation. In no sphere of public activity in our country since independence has the haitus between precept and practice, between policy pronouncements and actual execution been as great as in the domain of land reforms. With resolve and unambiguous political will, all other shortcomings and difficulties could have been overcome, in the absence of such a will even minor obstacles become formidable road blocks in the path of Indian Land Reform. Considering the character of the political power structure obtaining in the country it was only natural that the

required political will was not forthcoming. Again, in a society in which the entire weight of civil and criminal laws, judicial pronouncements and precedents, administrative traditions and practice is thrown on the side of existing social order based upon the inviolability of private property, an isolated law aimed at the restructuring of property relations in the rural areas has hardly any chance of success."

Although food self-sufficiency has been a basic policy objective since 1951, it has eluded us till now. The annual average imports of cereals during the 21 years ending in 1971 amount to 4.26 million tonnes and their average C&F value is Rs. 203.73 crores. This is a disturbing situation especially when 7.5 out of every 10 hectares of the sown area are under foodgrains and 70 out of every 100 of the working population are engaged in agriculture. The strategy in agriculture must concentrate on the consolidation and extension of Green Revolution. There is ample scope of increasing food production in India. In a study on "25 years of Research in Soil, Fertilizer and Water Management in India", Mr. J.S. Kanwar of the Indian Council of Agricultural Research, Delhi[5] has listed some advantages of scientific agriculture. He states that under controlled dosages of fertilizer and the use of HYV seeds, wheat yields may increase by 80 per cent to 158 per cent over untreated plots and rice yields by 77 to 127 per cent. In case of wheat, in 1968-69, the yield from the irrigated land was 22.0-121.6 per cent higher than the yield from unirrigated land. In case of paddy by a

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5. Quoted by B.R. Shenoy, "India's Food Problem", Eighth A.D. Shroff Memorial Lecture, Forum of Free Enterprise, Bombay, 1973.

minimum of 40.4 per cent (Kerala) to a maximum of 307.3 per cent in Jammu & Kashmir. The Green Revolution has given us new confidence to increase not only production but solving problems of national income, employment, dry farming problems, increasing qualitative yields by greater protein contents, increasing requirements of bankers, statisticians, dairy scientists, extension workers, etc. The programme can have implication of import saving and even export promotion and can provide a strong basis for development by attracting the educated to the fields and thus ending the divorce between the intellect and labour.

The Green Revolution is based upon better seeds, better irrigation, fertilizer and knowledge and these need strengthening. To the extent that we can develop irrigation we must make efforts in this direction. However, the total utilisable water resources of the country both surface and underground, are 93 million hectares, which is half the area under crops. To achieve better utilisation of water facilities would mean remodelling of headworks, enlarging channel capacities, supplementing irregularities of canal flows with available tubewells in canal areas, in lining of canals to avoid transit losses; proper application of irrigation methods -- surface, sub-surface, sprinkler, drip to the fields, having suitable drainage to avoid waterlogging, salt afflorescence; having suitable crop planning in irrigation projects, land-levelling and land shaping, realignment and lining of water courses where necessary, training of nalas, etc.

In the Agrarian Revolution, seed is the basic material on which the prosperity of agriculture depends. Seed is the cheapest method of increasing agricultural production. Its organisational

part needs attention. The various complaints regarding seeds are low quality seeds, untested seeds, genetic deterioration of seeds and physical contamination of seeds. The research stations, seed testing laboratories and Seeds Act enforcement agencies have to play their role. As regards the breeders seed, the job should be entrusted to certain selected breeders and institutions. It is necessary that quality checks be applied internally by breeders themselves on their produce under the overall guidance of ICAR. As regards the foundation seed, the National Seeds Corporation should be the major agency for production and distribution of important varieties and the production of foundation seed of local varieties should be the responsibility of State Governments. The State Government should bear direct responsibility regarding full offtake and proper storage of carry over stocks, if any. The State Governments must give suitable financial concessions to concerned agencies dealing in certified seed against the risks of large carry overs and write off of damaged seeds. Proper arrangements should be made for financing seed industry as early as possible.

Similarly fertilizer consumption is one of the cardinal strategies of agricultural growth. Its expansion and distribution are very important. The Ministry of Petroleum and Chemicals and Agriculture may examine the working of fertilizer factories and initiate corrective action. There is a need for soil analysis, proper distribution, better provision of fertilizer, better movement by railways, coordinated movements among different railways when more are concerned, concessional freight, class C priority for long haulage, doing away with the

certificates of district agricultural officers for concessional transport, fair margin for retailers, for apex organisations and quality control of fertilizers. The legal procedure under the Fertilizer Control Order for trying offenders should be simplified. Summary trials of offenders should be introduced for substandard goods. The number of fertilizer products should be minimised for greater intelligibility of farmers and quality control be enforced. The high prices and acute shortage of naptha have seriously affected fertilizer production all over the world. This coupled with underutilisation of capacity has created a further shortage. For further development, some substitute raw materials will have to be found. The commercial feasibility of coal needs exploration. A supplementary source of fertilizers and energy is gobar gas plant. Since its cost is not prohibitive it can be explored easily by even small and medium farmers.

The Green Revolution has yet to meet the challenge of imparting information, spreading it to cereals other than the wheat, soil exhaustion, susceptibility to crop diseases, evolving new varieties, dry farming, inequalities between irrigated and non-irrigated areas and so on. The greatest problem is that its introduction needs a capital structure of 10,000-15,000 rupees for equipping a farm of 7-8 acres which is perhaps the biggest roadblock in view of general capital starvation of agriculture.

Of course one has to bear in mind that the agrarian changes will not be very much possible without institutional reforms. Under insecure tenancies, oral leases, frequent changes of tenants from plot to plot to defeat tenancy laws, lack of desire

to enact legislation or to enforce it if enacted, rack renting, long delays in dealing with tenancy, faulty land ceiling acts are roadblocks in the way of improvement. As Ladejinsky has pointed out "that unless those who work on land own it, or at least are secure on the land as tenants, all the rest are likely to be writ on water".[6] The object of the Tenancy Acts was to give protection to all actual cultivators under the zamindars. However, the legal definition of a tenant was often very restrictive so that many actual cultivators did not get any protection. The tenancy legislation gave protection to the tenants but it did not include and protect the share croppers who were the tenants of the so-called raiyats or the protected tenants and not of intermediaries. These share-croppers are the Bargadars in West Bengal, the Bhagchasis in Orissa, the Bataidars in Bihar, the Adhiars in Assam and Sajhis in U.P. The share-croppers both in temporarily and permanently settled estates have no security of tenure in Assam. In Bengal, the law permitted the evictions, for personal cultivation, of share-croppers by landowners.

Wherever it is intended to give the tenants the ownership rights after some years, they are frequently changed from farm to farm to defeat the legislation. Most of the leases have become informal and oral and the law is silent on them. Most of these tenancies are unrecorded. There have been ejections under the device of voluntary surrenders.

The tenancy legislation was neglected/attended to indifferently or passed after long delays in many States. The

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6. Ladejinsky, "Tenurial Conditions and the Package Programme", Mainstream, March 13, 20, 27, 1965.

States did not move till it was too late and when finally they moved they were not serious about implementation. At lower levels of administration, collusion and evasion have gone unchecked. The revenue administration has been weak. Even where intermediary interests did not exist and where there was a systematic land record, the administration proved inadequate to enforce the tenancy legislation, and now the Green Revolution has intensified the philosophy of production first and postponement of the problems of redistributive justice. In non-Hyderabad part of Andhra Pradesh, the security of tenure was for three years and then it was taken up not after three years but fourteen. In Tamil Nadu, the initial measure gave protection to the tenants for one year but it was not replaced by a comprehensive reform even after fifteen years. In Jammu and Kashmir, protection to tenants was granted as late as 1965. The new tenancies are still unprotected.

The conformity to the national guidelines with respect to ceilings has yet to take a shape. The earlier ceiling laws offer a sad commentary on land reform. The ceilings in most of the States have been placed fairly high and many exemptions and escapes have been provided to nullify them in practice. There have been a large number of exemptions from the law, malafide transfers, partitions and poor implementation. Out of one billion acres declared surplus only 530,000 acres have been distributed so far. There have been wide variations with regard to the level of ceilings, exemptions and compensations. In Andhra Pradesh the Ceiling Act of 1961 placed the ceiling limit for each shareholder between 27 and 324 acres depending upon the type of the land. For additional members, 6 to 27 acres per member were

allowed. The legislation was expected to bring 73,692 acres of surplus land; achievement is 191 acres. In Tamil Nadu the ceiling is at 24 and 120 ordinary acres. Families with more than five members could acquire at the rate of 5 standard acres per additional member upto 60 standard acres and 10 standard acres as Streedhina. In Bihar, the limits are 20-26 acres. A land-holder could transfer land before ceilings. As many as 48,000 notices and 21,000 special notices were issued upto 1971; the result was no acquisition of surplus land till then. In Rajasthan, the ceiling is between 22-336 acres. For more than five members, the ceilings can be raised to twice the above area. The Act prohibited transfers after enactment, allowed it later and did not net a single acre till 1971. In Madhya Pradesh, the limit is 25-75 acres for 5 members and can be raised to twice the limit. Two years grace period was given to the landlords to dispose of their excess land any way they liked. Surplus land was 84,000 acres and acquisition is less than 1/6th. In U.P., the Act of 1960 lays down 40-80 acres as the ceiling limit for 5 members and additional 8 acres per individual member if the family is of more than 5 members. The surplus land is 238,000 acres and acquisition is 199,000 acres. In Maharashtra, the Act puts the limits between 18-125 acres for a family of five which can be doubled with more members. Surplus declared area is 271,000 acres; the acquisition is 123,000 acres. In Gujarat, the ceiling is between 19-132 acres. Actual acquisition is half the area declared surplus. In Mysore, the ceiling limit is already as high as 27-216 acres can be raised to a maximum of twice when the members are more than five. In Orissa, the

ceiling limit, 20-80 acres, laid down by the Act of 1965 has remained unenforced upto 1972.

Aggregate output includes industrial output. In the industrial sector as a whole there is a considerable idle capacity and it is possible to increase production without any substantial investment. The underutilisation on the basis of desirable multiple shifts has been much more than that on the present working shifts. Estimates of under-utilisation have varied over time. NCAER Studies[7] and RBI Studies[8] put it at high levels. The estimated per cent capacity utilisation in 1973-74 in several industries was as follows:

Iron and Steel 60, Aluminium 77, Castings and Forgings 51, Railway wagons 33, Agricultural Implements 50, Machine Tools 71, Electric Motors 55, PVC Power Cables 70, Paper and Paperboards 79, Newsprint 58, Fertilizers 65, Sulphuric Acid 66 and Electricity 47.

The existence of excess capacity increases the unit cost of production. It means waste of scarce resources of capital equipment, entrepreneurial and technical skills. The lack of production due to excess capacity feeds inflation. The State loses revenue. Additional costs like the care and custody of inventory, some of the irreducible administrative overheads and cost of maintenance of capital are also imposed.

The planners have planned expansion, it appears, without the means of sustaining the same. In some cases the registered

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7. NCAER, Under-Utilisation of Industrial Capacity, New Delhi.

8. RBI, "Excess Capacity and Production Potential in Selected Industries in India," April 1969.

capacity has been exaggerated to qualify for more finance, scarce raw material and other inputs. Some excess capacity has arisen due to the lack of complete synchronisation of inter-industry demand. The idle capacity may be due to the time lag in reaching full capacity. A steel plant takes three years to achieve full capacity after commissioning. In many other cases, the time may be still more. It may be there because of incorrect estimation of demand. The licensing policy, too has been responsible for permitting the erection of capacities in excess of availability of raw materials or demand. When costs go high and units become uneconomic, under-utilisation (or even un-utilisation) occurs. The non-availability of raw materials is another cause. The shortage of steel has been one of the main reasons for low utilisation in machine building and metal based industries. Shortage of copper has been responsible for idle capacity in electric motors, power transformers, bare copper conductors, winding wires and tube utensils. The shortage of zinc has been responsible for under-utilisation in zinc sheets, strips, zinc phosphide and lead for under-utilisation of lead pipe tubes, electric cables, wires, red lead and grey oxide. World shortage of sulphur has been responsible for the excess capacity in sulphuric acid. Lack of demand caused under-utilisation in metals, engineering, wire ropes and road rollers. Non-availability of components and spares, labour unrest, shortage of skilled labour, viz., die makers, turners, tool rooms and maintenance staff, moulders and millers, mill wright fitters, varnish makers and colour matchers and analytical chemists were responsible for unused capacity in various lines. Power cuts affected many

industries. The analysis is also relevant for remedial measures in different lines.

In the interest of rapid industrial production it will be appropriate if some restrictions on the corporate finance are relaxed. In view of rising prices, high taxation, restriction on dividend, the capacity and willingness of the public to invest in shares has been weakened and corporate finance has become a very important source. It is necessary that some hurdles in its way for investment are removed. There is a case for raising the limit of capital from Rs. 25 lakhs for approval by the Controller of Capital Issues. The limit was fixed four years ago and is much less in view of the rising prices. Again MRTP Act enacted six years ago put a limit of Rs. 20 crores on the capital. This has become unrealistic in view of the rising prices and needs a rise. Similarly, the exemption limits of the new industrial licensing procedure was upto Rs. 1 crore in 1970. It is appropriate to raise this due to the same reasons. These steps will encourage investment, cut red tape and increase production.

Moreover, the Industrial Policy followed since 1956 and more so since 1959 has meant inordinate delays, in the issue of letters of intent, licences to start new ventures, foreign exchange allocation and getting clearance from the Monopoly and Restrictive Trade Practices Act of 1969. In the past schemes have taken anything between 1½-3 years to get clearance. This is serious in view of low production and slump conditions.

One of the major constraints on the development of industry (and also of agriculture) is the power famine.

The achievement on this front has been less than the target, as is clear from the table below:

Power Generation - Targets and Achievements

Plan	Installed Generating Capacity (mKw)				Percentage Shortfall
	Cumulative		Addition		
	Target	Achievement	Target	Actual	
First Plan	3.60	3.40	1.30	1.10	15.4
Second Plan	6.90	6.65	3.50	2.25	35.7
Third Plan	12.69	10.17	7.04	4.52	35.8
Three Annual Plans	15.60	14.29	5.43	4.12	24.1
Fourth Plan	23.00	18.87	9.26	4.58	50.0

Source: Draft Fifth Five Year Plan, Vol. II, p. 118 (Partial Reproduction)

The country has vast hydro resources of about 215 billion Kwh energy per year. The expected harnessing by the end of Fifth Plan will be 8.8 per cent only. The FICCI Study[9] has put the gap between the requirement and availability for the country as a whole at 31.0 million KW (7.1 Mkw per day in U.P., 6.0 Mkw in Maharashtra, 4.4 Mkw in Karnataka, 3.2 Mkw in Andhra Pradesh and so on.) The power famine can be attributed to the following reasons:

(i) Delay in the implementation of power projects;

(ii) low utilisation of installed capacity;

(iii) irregular, inadequate and substandard supply of coal to generating stations;

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9. FICCI, Towards a Dynamic Economy, New Delhi, 1975.

(iv) low rainfall in the catchment areas of hydel stations;

(v) uneven hydro-resources over the regions which require large financial outlays for exploitation and have long gestation periods; and

(vi) inter-state water disputes.

The generation and distribution of electric power has to be vastly improved. Repairs and proper maintenance of existing stations, implementation of new projects, coordination among Ministries and Departments like Ministry of Energy, Electricity Boards, Planning Commission, Railways, Coal authorities; early commissioning of power projects nearing completion, adequate provision of other forms of energy like coal, provision of steel, delivery of plant and equipment, availability of finances according to the needs of the project appear necessary. The erection of the plant cannot commence in many cases because of lack of steel and cement. The financing of State Electricity Boards by loans and subsidy from State Governments has been unreliable and unpredictable and has been a cause of imbalances with respect to generation and transmission and means have to be found for adequate outlays.

Maintaining industrial harmony will be another step towards greater production. According to an RBI Study,[10] the number of man days lost increased from 3.3 million in 1963 to 9.9 million in 1967. In the first half of 1974, 26 million man days were lost. Harmonius industrial relations are vital for the greater production in this field.

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10. RBI, op. cit.

India has vast resources in many minerals. A large potential is yet to be utilised in these. Coal is one of the most important minerals and accounts for two-thirds of total production. Despite the nationalisation of 2 coking coal mines and 12 coke oven plants in 1972 and 711 non-coking mines in 1973, coal production has not significantly increased. The coal shortage has affected the power plants, medium and small industries and its inferior quality has resulted in breakdowns in power plants. Its shortage will also affect some new uses of coal -- in liquefaction of coal and its use in producing fertilisers.

The import bill on crude oil and products in 1973 is estimated to increase from 341.4 crores to 1,300 crores in 1974-75. In view of the high cost of oil and pressure on the balance of payments it is necessary to explore indigenous sources of oil. The discovery of recoverable oil so far (175 million tonnes) is far inadequate and the programme of exploration/ research/substitution has to be taken up on a war footing.

The production of iron ore has suffered in the recent past due to slow development of new mines and inadequate port facilities for bulk carriers. The progress in enlarging port facilities has been quite slow and deserves more attention.

The estimates of black money show its rising trend. As back as 1953-54, Kaldor put black money at 200-300 crores. The Wanchoo Committee put it at 811 crores for 1961-62, and 1,216 crores for 1965-66. D.K. Rangnekar, another member of the Committee, put it at Rs. 1,150 crores for 1961-62, Rs. 2,350 crores for 1965-66 and Rs. 3,080 crores for 1969-70. The present estimates put the figures at roughtly 10 per cent of GNP. This is a terrific increase.

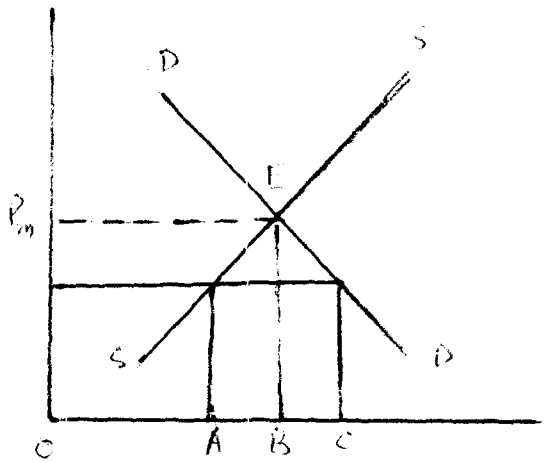
The causes of black money, according to some have to be found only in politics rather than in political economy. "In a system where the growth rate is very small and the per capita rise in income is very small, economic surpluses for manipulating politicians, avoiding defections, electoral majorities have to be found in the unaccounted money with a promise of more unaccounted money to those who render this help".[11] Political explanations apart, the economic explanations are not hard to find.

Basically it is the faulty manner of controls which strengthens the black market. The lure of easy money and steeply progressive taxation which makes evasion profitable when monetary and fiscal measures are not rigid can be other reasons. Vast fortunes have been accumulated by the speculators in the urban property and these have been with them due to evasion and avoidance of taxes.

Economic explanations of black money via shortages, controls and black market can be traced as under:

Price controls lead to excess demand, i.e., shortage and this shortage prompts persons to deal in the black market. This shortage is more when elasticities (demand, income) are more.

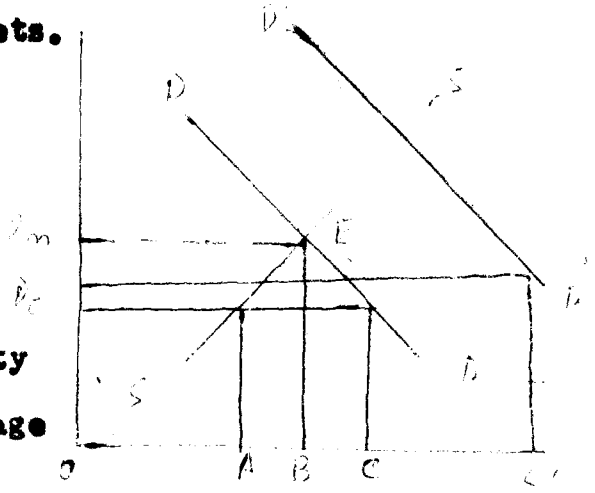
When demand and supply curves are more elastic, the excess demand is more with price controls. The control will generate black market. Market price BE is too high for many persons - price reduced to OPC by controls - Excess demand or shortage is AC.



11. J.D. Sethi, op. cit.

When demand and supply are less elastic, the relative excess demand will be less - price control will not generate more shortages or black markets. AC in this diagram is less than the gap (AC) in the above diagram.

Where income elasticity of demand is big - more shortages and hence more black markets. As a result of fall in price - more real income is generated and results into increase in demand of other commodities and of this commodity also. If income elasticity is more, cetris paribus, more shortage will be there.



When income elasticity is less, price controls will generate less shortages and less black market. In this case the gap AC is less than AC in the above diagram.

When income elasticity of supply is more, the shortage will be more - and there will be more black markets. Through price control producers income diminishes as they receive income through prices. The gap in this case is MC.

When income elasticity of supply is less, ceteris paribus, shortages will be less and less black markets. The income is reduced in this case. Income elasticity of demand is less - gap is MC which is less than a similar gap MC above.

Black markets and black money always snowball. At (lower) controlled prices (and controlled prices are less than free market prices) some expenditure is saved and overflows to be spent in other markets. Prices of other commodities increase which are brought under price controls leading to more black markets.

Black markets militate against growth, socialistic redistribution, self-reliance and price stability and all these are harmful for repayments.

As black earnings increase; tax base shrinks or increases much slower, because these incomes cannot be revealed to tax authorities. In the second round the tax base shrinks again when tax authorities cannot meet their expenditure, impose steep taxation and encourate further evasion and avoidance or decide to have plan holidays. The planned development suffers.

It does an equally big harm to private investment which cannot be undertaken for fear of being challenged and punished hence development suffers on this account too.

The economic growth does not occur but merely prices increase by black markets because the black money is invested in gold, land, costly buildings, diamonds - most of these are

non-reproduceable assets - which pushes up their prices and not supply.

Black earnings are in high income brackets and still escape taxation hence they lead to greater inequalities and are the enemy of redistributive justice.

As regards controls and black market, it is proper to take the laws of economics into consideration. High controlled prices in case of commodities which are luxuries and siphoning off the excess profits; lower controlled price in case of more essential articles and adequate distribution system seem the correct answer. In any case having controls with considerations of elasticities rather than having these in ad-hoc-ish ways is a more suitable method.

Still better method is proper dual prices and their enforcement in which only the vulnerable section is protected and the affluent section pays a higher price so as to keep the average price high enough for proper inducement to investment.

It is also necessary to enforce taxation more efficiently and strictly to check evasion and avoidance and thus to make a dent on the unaccounted money.

The private corporate sector has not experienced a significant revival after 1966-67. The rate of growth of fixed assets of large as well as medium public limited companies have been on the decline. The position is worse due to the shortage of steel, cement and power. The emphasis on small and medium concerns, in some cases, for production and discouraging production of big concerns by industrial licensing seems incorrect because the small concerns lack training, education

and managerial skills and entrepreneurship for increasing production on modern lines. Some degree of monopoly has to be put up with in the interest of greater production.

The growth of public sector, which has been appropriating sizeable share of industrial growth, has been keeping matched with its inefficiency. The first plan (actuals) showed 46 per cent of aggregate investment in the public sector. The provision for second, third and fourth Five Year Plans were 61.3 per cent, 58.6 per cent and 63.7 per cent respectively. The inefficiency of the public sector is reflected in the low productivity of the enterprises. Here are some glaring examples:

According to the Audit Report (Commercial) 1967, public sector companies with a total paid up capital of Rs. 1,187.90 crores made a net profit of 9.92 crores... The grant of interest holiday to Hindustan Steel Limited amounted to Rs. 357.10 crores upto March 31, 1962. Out of 61 public sector undertakings, in 1970-71, the four top scrorers alone lost 42 crores in a single year 1970-71.

Heavy Engineering Corporation	15 crores
Hindustan Steel Ltd.	11.39 crores
Neyveli Lignite Corporation	10.45 crores
Mining and Allied Machinery Corporation	6.10 crores
Total	42.94 crores

The total loss upto April 5, 1972 on an investment of Rs. 10,853 million was Rs. 1,433 million on various 'temples of steel'.

(in Millions)

Steel Plant	Total Investment	Losses so far
Bhilai	Rs. 3,632	Rs. 271
Durgapur	Rs. 2,968	Rs. 840
Rourkela	Rs. 4,153	Rs. 322
Total	Rs.10,853	Rs.1,433

Source: L.S.Q., 264, April 5, 1971.

To earn a net profit of Rs. 853 lakhs, the 14 nationalised banks had to spend 7,507 lakhs on salaries and allowances in the year 1969. The ratio of salaries and profits is 9:1.

Name of the Bank	Net Profit for the Year as shown in the Public Profit & Loss Account of the Year			Expenditure debited under the head salaries and allowances for the year in the published profit and loss account of the year		
	1967	1968	1969	1967	1968	1969
Central Bank of India	119.73	118.73	109.07	1158.32	1274.52	1371.82
Bank of India	149.86	149.83	161.15	680.59	749.58	850.66
P.National Bank	146.89	146.17	158.71	797.6	891.79	923.0
Bank of Baroda	92.17	92.81	56.17	567.14	675.77	820.88
United Commercial Bank	85.89	83.40	79.63	458.37	529.12	569.02
Canara Bank	39.64	44.48	55.36	324.30	370.44	438.41
United Bank of India	26.0	25.73	45.44	422.80	448.55	463.15
Dena Bank	33.03	31.48	30.63	235.70	274.67	314.62
Syndicate Bank	25.26	31.20	28.89	219.62	257.11	370.82
Union Bank of India	36.29	34.14	31.61	286.31	343.40	389.36
Allahabad Bank	38.5	37.95	40.19	265.45	298.61	313.11
Indian Bank	12.98	13.37	7.33	225.02	256.16	270.46
Bank of Maharashtra	21.00	24.49	22.10	109.55	133.35	160.71
Indian Overseas Bank	13.54	15.16	9.24	207.30	238.99	251.55
Total	840.87	848.99	835.52	5958.06	6741.89	7507.57

Source: L.S.Q., 177, April 2, 1971.

The atrophy of initiative red tape, playing on the safe side of the party in power, domination of site selection on political factors (e.g. Heavy electricals at Bhopal and fertilizer plants in each State) and in utter disregard of costs, delays in implementation and inflation of costs, overstaffing of unskilled labour (e.g. Bhopal), higher average wages (as in Ranchi), flight of technical personnel due to various policies are reasons for the low performance of the public sector. The real question is whether public sector can generate, for growth, surpluses which were expected of it or not and whether India can afford to burn resources by first acquiring, with great difficulty, loans on interest and then making losses on these loans. The scheme is neither conducive to growth nor to the repayment problem. Various measures like reexamination and more heroic programmes of outright auction of a lot of this sector have been proposed as various remedies. All these steps need a lot of political courage in a 'socialistic pattern of society'.

The cost benefit tool should be applied to public enterprises and location and selection of projects must be based upon sound economics. Norms of work standards should be laid down for all levels of employees in the Government sector. The managerial and labour personnel in the public enterprises lack social commitment. Fixity of responsibility for avoiding pitfalls and giving suitable credit, laying unit-wise targets of production can be some other suitable measures.

The task in many cases, to borrow a Robertsonian saying is to economise commonsense in these cases. A public sector

undertaking which does not seem to possess rational basis need not be allowed to have real chances. In the gap between the real and rational, there lurk many of our problems of this sector as well as of other sectors.

These are only a few stray recommendations. The agenda is, however, incomplete but it bound to be incomplete for the problem of growth is a vast one. Policy corrections in the fields suggested can, however, have rapid repercussions.

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